#### Ready-to-use configuration

| Number of identical Sepam | This order form can be used to define a complete Sepam configuration. |
|---------------------------|---|
| Fax:                      | _ Page: /   |
| Country:                  | Customer's code:  |
| From:                     | Order number:   |

| Base unit, co       | onnectors ar                            | nd appli | cation |  |  |  |  |  |
|---------------------|---|----------|--------|--|--|--|--|--|
| Base unit and UMI   |   |          |        |  |  |  |  |  |
| Base unit with adva | Base unit with advanced UMI S10UD 59607 |          |        |  |  |  |  |  |
| With lead sea       | al accessory <sup>(1)</sup>             | AMT852   | 59639  |  |  |  |  |  |
| (1) Can be used or  | nly with an advance                     | e UMI.   |        |  |  |  |  |  |
| Base unit with basi | c UMI                                   | S10UX    | 59603  |  |  |  |  |  |
| Remote adva         | nced UMI module                         | DSM303   | 59608  |  |  |  |  |  |
| Connection cord     | L = 0.6 m                               | CCA770   | 59660  |  |  |  |  |  |
|                     | L = 2 m                                 | CCA772   | 59661  |  |  |  |  |  |
|                     | L = 4 m                                 | CCA774   | 59662  |  |  |  |  |  |
| Mounting plan       | te                                      | AMT840   | 59670  |  |  |  |  |  |
| Working language    | •                                       |          |        |  |  |  |  |  |
| Sepam serie 20      | EN/FR                                   |          | 59609  |  |  |  |  |  |
|                     | EN/ES                                   |          | 59611  |  |  |  |  |  |
| Connectors          |   |          |        |  |  |  |  |  |
| Туре                | Screw-type                              | CCA620   | 59668  |  |  |  |  |  |
|                     | Ring-lug type                           | CCA622   | 59669  |  |  |  |  |  |

| Application | Туре |       | Sensor |       |           |        |
|-------------|------|-------|--------|-------|-----------|--------|
| Substation  | S20  | 59620 | СТ     | СТ    | LPCT      |        |
|             | S23  | 59625 | СТ     | СТ    | LPCT      |        |
|             | S24  | 59778 | СТ     | СТ    | LPCT      |        |
| Transformer | T20  | 59621 | СТ     | СТ    | LPCT      |        |
|             | T23  | 59627 | СТ     | СТ    | LPCT      |        |
|             | T24  | 59779 | СТ     | СТ    | LPCT      |        |
| Motor       | M20  | 59622 | СТ     | СТ    | LPCT      |        |
| Busbars     | B21  | 59624 |        |       |           | VT     |
|             | B22  | 59625 |        |       |           | VT     |
|             |      |       | 59630  | 5962  | 29 59631  | 59632  |
|             |      |       | CCA630 | CCA63 | 34 CCA670 | CCT640 |

**Note:** CCA630 : 1A/5A CT current connector **Note:** CCA634 : 1A/5A CT current + 10 connector

CCA612

59663

#### Modules, communication interfaces and core balance CTs

| Core balance CTs          |        |       |
|---------------------------|--------|-------|
| Core balance CT, Ø 120 mm | CSH120 | 59635 |
| Core balance CT, Ø 200 mm | CSH200 | 59636 |
| Interposing ring CT       | CSH30  | 59634 |
| Core balance CT interface | ACE990 | 59672 |

Note: only one core balance CT can be added.

**Note:** core balance CTs can not be used with connector CCA634.

| Modules                                    |         |       |
|--|---------|-------|
| Input / output modules                     |         |       |
| 10 inputs + 4 outputs, 24-250 V DC         | MES114  | 59646 |
| 10 inputs + 4 outputs, 110-125 V DC / V AC | MES114E | 59651 |
| 10 inputs + 4 outputs, 220-250 V DC / V AC | MES114F | 59652 |

Note: the Sepam base unit has 4 outputs; only one input/output module can be added.

| Remote modules       |          |       |           | Connection | cord  |  |
|----------------------|----------|-------|-----------|------------|-------|--|
| 8 temperature sensor | MET148-2 | 59641 | L = 0.6 m | CCA770     | 59660 |  |
| module               |          |       | L = 2 m   | CCA772     | 59661 |  |
|                      |          |       | L = 4 m   | CCA774     | 59662 |  |

**Note:** the MET148-2 can be used only with applications T and M.

| Analog output module | MSA141 | 59647 | L = 0.6 m | CCA | 1770 | 59660 |  |
|----------------------|--------|-------|-----------|-----|------|-------|--|
|                      |        |       | L = 2 m   | CCA | 772  | 59661 |  |
|                      |        |       | L = 4 m   | CCA | \774 | 59662 |  |

| Communication interfaces                      |                  |      |
|---|------------------|------|
| Modbus interfaces                             | Connection cord  |      |
| 2-wire RS 485 interface ACE949-2 <b>59642</b> | CCA612 <b>5</b>  | 9663 |
| 4-wire RS 485 interface ACE959 <b>59643</b>   | CCA612 <b>5</b>  | 9663 |
| Fiber optic interface ACE937 <b>59644</b>     | CCA612 <b>5</b>  | 9663 |
| Multi-protocol interfaces (Modbus, DNP3 or    | IEC 60870-5-103) |      |
| 2-wire RS 485 interface ACE969TP 59723        | CCA612 <b>5</b>  | 9663 |

Note: only one interface per application.

Fiber optic interface ACE969FC **59724** 

#### Ready-to-use configuration

| From:   |          |           |                 | Order numb              | er:                          |        |    |      |
|---|----------|-----------|-----------------|-------------------------|------------------------------|--------|----|------|
| Country:  |          |           |                 | Customer's cod          | de:                          |        |    |      |
| Fax:  |          |           |                 | P <u>ag</u>             | ge:/                         |        |    |      |
| Number of identical Separ configurations ordered: | n        |           | This order form | can be used to<br>Check | define a comp<br>the boxes X |        |    |      |
| Base unit, connector                              | s and ap | plication |                 |                         |                              |        |    |      |
| Base unit and UMI                                 |          |           | Application     | Туре                    |                              | Sensor |    |      |
| Base unit with advanced UMI                       | S10MD    | 59604     | Substation      | S40                     | 59680                        | СТ     | СТ | LPCT |

| Base unit, o       | onnecto        | ors and applica         | tion  |             |      |       |        |       |      |       |
|--------------------|----------------|-------------------------|-------|-------------|------|-------|--------|-------|------|-------|
| Base unit and      | UMI            |                         |       | Application | Туре |       | Sensor |       |      |       |
| Base unit with adv | anced UMI      | S10MD                   | 59604 | Substation  | S40  | 59680 | СТ     | СТ    | LPCT |       |
| With lead s        | eal accessor   | y <sup>(1)</sup> AMT852 | 59639 |             | S41  | 59681 | СТ     | СТ    | LPCT |       |
| (1) Can be used of | only with an a | advance UMI.            |       |             | S42  | 59682 | СТ     | СТ    | LPCT |       |
| Base unit with bas | ic UMI         | S10MX                   | 59600 |             | S43  | 59687 | СТ     | СТ    | LPCT |       |
| Remote ad          | anced UMI      | mor DSM303              | 59608 |             | S44  | 59688 | СТ     | СТ    | LPCT |       |
| Connection         | L = 0.6 m      | CCA770                  | 59660 |             | S50  | 59780 | СТ     | СТ    | LPCT |       |
| cord               | L = 2 m        | CCA772                  | 59661 |             | S51  | 59781 | СТ     | СТ    | LPCT |       |
|                    | L = 4 m        | CCA774                  | 59662 |             | S52  | 59782 | СТ     | СТ    | LPCT |       |
| Support de         | montage        | AMT840                  | 59670 |             | S53  | 59783 | СТ     | СТ    | LPCT |       |
| Working languag    | je             |                         |       |             | S54  | 59786 | СТ     | СТ    | LPCT |       |
| Sepam serie 40     | EN/FR          |                         | 59615 | Transformer | T40  | 59683 | СТ     | СТ    | LPCT |       |
|                    | EN/ES          |                         | 59616 |             | T42  | 59684 | СТ     | СТ    | LPCT |       |
| Connectors         |                |                         |       |             | T50  | 59784 | СТ     | СТ    | LPCT |       |
| Type Screw-type    | CCA620 -       | 59668 and CCA626 -      | 59656 |             | T52  | 59785 | СТ     | СТ    | LPCT |       |
| Ring-lug typ       | e CCA622 -     | 59669 and CCA627 -      | 59657 | Motor       | M40  | 59689 | СТ     | CT    | LPCT |       |
|                    |                |                         |       |             | M41  | 59685 | СТ     | CT    | LPCT |       |
|                    |                |                         |       | Generator   | G40  | 59686 | СТ     | СТ    | LPCT |       |
|                    |                |                         |       | ·           | ·    |       | 59630  | 59629 |      | 59631 |

# Modules, communication interfaces and core balance CTs Core balance CTs Secondary Core balance CT, Ø 120 mm CSH120 59635 Modules Core balance CT, Ø 200 mm CSH200 59636 Input / output modules Interposing ring CT CSH30 59634 10 inputs + 4 output Core balance CT interface ACE990 59672 10 inputs + 4 output

Note: only one core balance CT can be added.

**Note:** core balance CTs can not be used with connector CCA634.

| Modules                                    |         |       |
|--|---------|-------|
| Input / output modules                     |         |       |
| 10 inputs + 4 outputs, 24-250 V DC         | MES114  | 59646 |
| 10 inputs + 4 outputs, 110-125 V DC / V AC | MES114E | 59651 |
|  | MES114F | 59652 |
| 10 inputs + 4 outputs, 220-250 V DC / V AC |         |       |

CCA630 CCA634

CCA670

| <b>Note:</b> the Sepam base |                |                  |           |           |        |
|-----------------------------|----------------|------------------|-----------|-----------|--------|
| Remote modules              |                |                  |           | Connectio | n cord |
| 8 temperature sensor        | MET148-2       | 59641            | L = 0.6 m | CCA770    | 59660  |
| module                      |                |                  | L = 2 m   | CCA772    | 59661  |
|                             |                |                  |           |           |        |
|                             |                |                  | L = 4 m   | CCA774    | 59662  |
| Note: the MET148-2          |                |                  |           |           |        |
| Analog output module        | MSA141         | 59647            | L = 0.6 m | CCA770    | 59660  |
|                             |                |                  | L = 2 m   | CCA772    | 59661  |
|                             |                |                  | L = 4 m   | CCA774    | 59662  |
| Note: the MSA141 car        | be used with a | all the applicat | ions.     |           |        |
| Communication in            | erfaces        |                  |           |           |        |
| Modbus interfaces           |                |                  |           | Connectio | n cord |
| 2-wire RS 485 interface     | ACE949-2       | 59642            |           | CCA612    | 59663  |

|                         |                     |              | L = 4  m    | CCA774    | 59662  |
|-------------------------|---------------------|--------------|-------------|-----------|--------|
| Note: the MSA141 car    | be used with all    | the applicat | ions.       |           |        |
| Communication in        | erfaces             |              |             |           |        |
| Modbus interfaces       |                     |              |             | Connectio | n cord |
| 2-wire RS 485 interface | ACE949-2            | 59642        |             | CCA612    | 59663  |
| 4-wire RS 485 interface | ACE959              | 59643        |             | CCA612    | 59663  |
| Fiber optic interface   | ACE937              | 59644        |             | CCA612    | 59663  |
| Multi-protocol interfa  | ces (Modbus, DI     | NP3 or IEC   | 60870-5-103 | 3)        |        |
| 2-wire RS 485 interface | ACE969TP-2          | 59723        |             | CCA612    | 59663  |
| Fiber optic interface   | ACE969FO-2          | 59724        |             | CCA612    | 59663  |
| TCP/IP interfaces (618  | 50 and Modbus       | )            |             |           |        |
| TCP/IP firmware option  | !                   | 59754        |             |           |        |
| 2 RJ45 interface        | ACE850TP            | 59658        |             |           |        |
| Fiber optic interface   | ACE850FO            | 59659        |             |           |        |
| Mate. The commention    | and to to about all | - AOE050 T   | D / EO :    |           |        |

Note: The connection cord is included in ACE850 TP and FO interfaces

Note: only one interface per application.

### Ready-to-use configuration

|  |   |                                  |  |  |   |  |  |                                       |  | _   |   |
|--|---|----------------------------------|--|--|---|--|--|---------------------------------------|--|---|---|
| From:  |   |                                  | (  | Order n  | umber:  |  |  |                                       |  |   |   |
| Country:   |   |                                  | Cus  | stomer's   | s code:   |  |  |                                       |  |   |   |
| Fax:   |   |                                  |  |  | Page:   | /  |  |                                       |  |   |   |
|  |   |                                  |  |  |   |  |  |                                       |  |   |   |
| Number of identical Separ  | n   |                                  | This order for   | m can b  | oe used to  | define a con   | nplete Se  | epam confi                            | guration.  |   |   |
| configurations ordered:  |   |                                  | Ch   | eck the  | boxes X   | or indica  | te the re  | quired qua                            | ntities  |   |   |
|  |   |                                  | in the appro   | opriate s  | spaces  | according  | g to your  | choices.                              |  |   |   |
|  |   |                                  |  | _  |   |  |  |                                       | _  |   |   |
| Sepam series 60 bas  | e unit, car   | tridge, co                       |  | l appl   | ication   |  |  |                                       |  |   |   |
| Base unit and UMI  |   |                                  | Application  | _  | /pe   | B1 sense   |  |                                       |  |   |   |
| Base unit with mimic-based UMI   |   | 59837                            | Substation   | S60  | 59787   | СТ   | СТ   | LPCT                                  |  |   |   |
| Base unit with advanced UMI  | SEP363  | 59836                            | <del>-</del> ,   | S62  | 59789   | CT   | CT   | LPCT                                  |  |   |   |
| With lead seal accessory  (1) Can be used only with an accessory   |   | 59639                            | Transformer  | T60<br>T62   | 59790<br>59791  | CT<br>CT   | CT<br>CT   | LPCT                                  | _  |   |   |
| Base unit without basic UMI  | SEP060  | 59835                            | Motor  | M61  | 59791   | СТ   | СТ   | LPCT                                  |  |   |   |
| Remote advanced  | DSM303  | 59608                            | Generator  | G60  | 59793   | СТ   | СТ   | LPCT                                  | _  |   |   |
| UMI module (compulsory   |   | 00000                            |  | G62  | 59794   | СТ   | СТ   | LPCT                                  | _  |   |   |
| Connection L = 0.6 m   | CCA770  | 59660                            | Capacitor  | C60  | 59795   | СТ   | СТ   | LPCT                                  |  |   |   |
| cord $L = 2 \text{ m}$   | CCA772  | 59661                            |  |  |   | 5963   |  |                                       | 02   |   |   |
| L = 4 m  | CCA774  | 59662                            |  |  |   | CCA63  | 0 CCA63  | 4 CCA6                                | 71   |   |   |
| Mounting plate   | AMT880  | 59706                            |  |  |   | Note: CC   | A630 : 1A  | /5A CT curre                          | ent connector  |   |   |
| Note: 8 mounting clips included  | 1   |                                  |  |  |   |  |  |                                       |  |   |   |
| Memory cartridge   |   |                                  |  |  |   |  |  |                                       |  |   |   |
| Memory cartridge   | MMS020  | 59707                            |  |  |   |  |  |                                       |  |   |   |
|  |   |                                  |  |  |   |  |  |                                       |  |   |   |
| Note: option required to use Lo  | gipam program   | ١.                               |  |  |   |  |  |                                       |  |   |   |
| Working language   |   |                                  |  |  |   |  |  |                                       |  |   |   |
| Sepam serie 60 EN / FR   |   | 59846                            |  |  |   |  |  |                                       |  |   |   |
| EN/ES  |   | 59847                            |  |  |   |  |  |                                       |  |   |   |
| Connectors   | CC 4 630  | FOCCO                            |  |  |   |  |  |                                       |  |   |   |
| Type Screw-type Ring-lug type  | CCA620<br>CCA622  | 59668<br>59669                   |  |  |   |  |  |                                       |  |   |   |
|  |   |                                  |  |  |   |  |  |                                       |  |   |   |
| Modules, communica   | ation inter   | faces and                        |  | e CTs  |   |  |  |                                       |  |   |   |
| Core balance CTs   |   |                                  | Modules  |  |   |  |  |                                       |  |   |   |
| Core balance CTs<br>Core balance CT, Ø 120 mm  | CSH120  | 59635                            | Modules<br>Input / output r  | modules  | 3   | _  |  |                                       | MES120   | 59715   |   |
| Core balance CTs   |   |                                  | Modules  | modules  | s<br>) + 6 outputs  |  |  | _                                     | MES120<br>MES120G  | 59715<br>59716  | Ī |
| Core balance CTs  Core balance CT, Ø 120 mm  Core balance CT, Ø 200 mm   | CSH120<br>CSH200  | 59635<br>59636                   | Modules<br>Input / output r<br>14 inputs (24-25  | modules<br>50 V DC)<br>250 V DC  | s<br>) + 6 outputs<br>C) + 6 output   | ts   |  |                                       |  |   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C   | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1  | modules<br>50 V DC)<br>250 V DC<br>125 V DC  | s<br>) + 6 outputs<br>C) + 6 output   | ts   |  |                                       | MES120G<br>MES120H   | 59716   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul   | modules<br>50 V DC)<br>250 V DC<br>125 V DC  | s ) + 6 outputs C) + 6 output C) + 6 output C) + 6 output   | ts<br>ts   |  | _                                     | MES120G<br>MES120H   | 59716<br>59722  |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C   | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul 8 temperature s   | modules<br>50 V DC)<br>250 V DC<br>125 V DC  | s ) + 6 outputs C) + 6 output C) + 6 output C) + 6 output   | ts<br>ts   | 59641  | <u> </u>                              | MES120G<br>MES120H<br>connection cord<br>= 0.6 m CCA770  | 59716<br>59722<br>59660   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul   | modules<br>50 V DC)<br>250 V DC<br>125 V DC  | s ) + 6 outputs C) + 6 output C) + 6 output C) + 6 output   | ts<br>ts   | 59641  | <u></u>                               | MES120G<br>MES120H<br>connection cord<br>= 0.6 m CCA770<br>= 2 m CCA772  | 59716<br>59722<br>59660<br>59661  |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul 8 temperature s module  | modules<br>50 V DC)<br>250 V DC<br>125 V DC  | s ) + 6 outputs C) + 6 output C) + 6 output C) + 6 output   | ts<br>ts   | 59641  | <u></u>                               | MES120G<br>MES120H<br>connection cord<br>= 0.6 m CCA770  | 59716<br>59722<br>59660   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul 8 temperature s   | modules<br>50 V DC)<br>250 V DC<br>125 V DC  | s ) + 6 outputs C) + 6 output C) + 6 output C) + 6 output   | ts<br>ts   | 59641  | <u></u>                               | MES120G<br>MES120H<br>connection cord<br>= 0.6 m CCA770<br>= 2 m CCA772  | 59716<br>59722<br>59660<br>59661  |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul 8 temperature s module  | modules<br>50 V DC)<br>250 V DO<br>125 V DO<br>les   | s ) + 6 outputs C) + 6 output C) + 6 output MET148-2  | is<br>is   | 59641  | <u> </u>                              | MES120G<br>MES120H<br>connection cord<br>= 0.6 m CCA770<br>= 2 m CCA772  | 59716<br>59722<br>59660<br>59661  |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul 8 temperature s module  | modules<br>50 V DC)<br>250 V DO<br>125 V DO<br>les   | s ) + 6 outputs C) + 6 output C) + 6 output MET148-2  | is<br>is   |  | <u> </u>                              | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  | 59716<br>59722<br>59660<br>59661<br>59662   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul 8 temperature s module N o Analog output m  | modules<br>50 V DC)<br>250 V DC<br>125 V DC<br>125 V DC<br>125 V DC  | s ) + 6 outputs C) + 6 output C) + 6 output MET148-2 MSA141   | is is  | 59647  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  | 59716<br>59722<br>59660<br>59661<br>59662   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs (220-2-14 inputs (110-1-17)) Remote modul 8 temperature s module  N o Analog output m  | modules<br>50 V DC)<br>250 V DC<br>125 V DC<br>125 V DC<br>125 V DC<br>141 Can   | s ) + 6 outputs C) + 6 output C) + 6 output MET148-2 MSA141   | is is  | 59647  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA770 = 2 m CCA770 = 2 m CCA770 = 4 m CCA770   | 59716<br>59722<br>59660<br>59661<br>59662<br>59660<br>59661                                     |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs (220-2-14 inputs (110-1-17)) Remote modul 8 temperature s module  N o Analog output m  Note: the MSA Synchro-check   | modules 50 V DC) 250 V DC 125  | MSA141  be used with  | is is  | 59647  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025   | 59716<br>59722<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662                            |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs (220-2-14 inputs (110-1-17)) Remote modul 8 temperature s module  N o Analog output m  Note: the MSA Synchro-check in Mounti   | modules<br>50 V DC)<br>250 V DC<br>125 V DC<br>125 V DC<br>125 V DC<br>141 Can   | MSA141  be used with  | is is  | 59647  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA770 = 2 m CCA770 = 2 m CCA770 = 4 m CCA770   | 59716<br>59722<br>59660<br>59661<br>59662<br>59661<br>59662                                     |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>T can be added     | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs (220-2-14 inputs (110-1-17)) Remote modul 8 temperature s module  N o Analog output m  Note: the MSA Synchro-check   | modules 50 V DC) 250 V DC 125  | MSA141  be used with  | is is  | 59647  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025   | 59716<br>59722<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662                            |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can no          | CSH120 CSH200 CSH30 ACE990 T can be addect the used with  | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs (220-2-14 inputs (110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | modules 50 V DC) 250 V DC 125  | MSA141  be used with  | is is  | 59647  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025   | 59716<br>59722<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662                            |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be addect the used with  | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs (220-2-14 inputs (110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | modules 50 V DC) 250 V DC 125  | MSA141  be used with  | is is  | 59647  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025   | 59716<br>59722<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662                            |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs (220-2-14 inputs (110-1-17)) Remote modul 8 temperature s module  N O Analog output m  Note: the MSA Synchro-check in Mountin N O  | modules 50 V DC) 250 V DC) 125 V DC 125 | MET148-2  MSA141  be used with  | is is  | 59647  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840   | 59716<br>59722<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662                            |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25 14 inputs (220-2 14 inputs (110-1 N Remote modul 8 temperature s module  N O Analog output m  Note: the MSA Synchro-check r Mounti N O Modbus interfa  | modules 50 V DC) 250 V DC) 125 V DC) | MET148-2  MSA141  be used with  | is is  | 59647 eations.   |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA772 = 4 m CCA774  MCS025 AMT840  | 59716<br>59722<br>59660<br>59661<br>59662<br>59661<br>59662<br>59712<br>59670                   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | modules 50 V DC) 250 V DC) 125 V DC) | MET148-2  MSA141  be used with  ACE949-2  ACE959  | is<br>is<br>h all the applic   | 59647 cations.   |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840  connection cord CCA612                               | 59716<br>59722<br>59660<br>59661<br>59662<br>59661<br>59662<br>59712<br>59670                   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs (220-2-14 inputs (110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | modules 50 V DC) 250 V DC) 125 V DC 125 | MET148-2  MSA141  be used with  ACE949-2  ACE959  ACE937  | ts   | 59647 seations.  |                                       | MES120G  | 59716<br>59722<br>59660<br>59661<br>59662<br>59661<br>59662<br>59712<br>59670                   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | modules 50 V DC) 250 V DC) 125 V DC) | MET148-2  MSA141  be used with  ACE949-2  ACE937  ACE937  ACE937  ACE9658   | ts ts the second of the second | 59647 seations.  |                                       | MES120G  | 59716<br>59722<br>59660<br>59661<br>59662<br>59661<br>59662<br>59712<br>59670                   |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (210-1-14 inputs) (210-1-14 inputs) (210-1-14 inputs) (210-14 inputs) ( | modules 50 V DC) 250 V DC) 125 V DC) | MET148-2  MSA141  be used with  ACE949-2  ACE937  ACE937  ACE937  ACE9658   | h all the applic   | 59647  59642  59643 59644 C 60870-5  |                                       | MES120G MES120H  connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA774  MCS025 AMT840  connection cord CCA612 CCA612 CCA612 | 59716<br>59722<br>59660<br>59661<br>59662<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663 |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (110-1 N Remote modul 8 temperature s module  N O Analog output m  Note: the MSA Synchro-check in Mounti N O  Modbus interfa 2-wire RS 485 in 4-wire RS 485 in Fiber optic interf Multi-protocol 2-wire RS 485 in 2-wire RS 485 in 5-wire RS 485 in 6-wire RS 485  | modules 50 V DC) 250 V DC) 125 V DC) | be used with  ACE949-2 ACE959 ACE96FO-2 ACE969FO-2 ACE969FO-2   | h all the applic   | 59647 seations.  59642 59643 59644 C 60870-559723  |                                       | MES120G  | 59716<br>59722<br>59660<br>59661<br>59662<br>59662<br>59662<br>59712<br>59670<br>59663<br>59663 |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (110-1 N Remote modul 8 temperature s module  No Analog output m  Note: the MSA Synchro-check in Mounti No Modbus interfa 2-wire RS 485 in Fiber optic interf Multi-protocol 2-wire RS 485 in Fiber optic interf  | modules 50 V DC) 250 V DC 125  | be used with  ACE949-2 ACE959 ACE96FO-2 ACE969FO-2 ACE969FO-2   | h all the applic   | 59647 seations.  59642 59643 59644 C 60870-559723  |                                       | MES120G  | 59716<br>59722<br>59660<br>59661<br>59662<br>59662<br>59662<br>59712<br>59670<br>59663<br>59663 |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (110-1 N Remote modul 8 temperature s module  No Analog output m  Note: the MSA Synchro-check in Mounti No Modbus interfa 2-wire RS 485 in 4-wire RS 485 in Fiber optic interf Multi-protocol 2-wire RS 485 in Fiber optic interface  | modules 50 V DC) 250 V DC 125  | be used with  ACE949-2 ACE959 ACE96FO-2 ACE969FO-2 ACE969FO-2   | h all the applic   | 59647  59642  59643  59644  C 60870-5  59723  59724  |                                       | MES120G  | 59716<br>59722<br>59660<br>59661<br>59662<br>59662<br>59662<br>59712<br>59670<br>59663<br>59663 |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | modules 50 V DC) 250 V DC 125  | MET148-2  MSA141  be used with  ACE949-2  ACE959  ACE969TP-2  ACE969FO-2  50 and Mod  | h all the applic   | 59642<br>59642<br>59643<br>59644<br>C 60870-5<br>59723<br>59724                              |                                       | MES120G  | 59716<br>59722<br>59660<br>59661<br>59662<br>59662<br>59662<br>59712<br>59670<br>59663<br>59663 |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | modules 50 V DC) 250 V DC 125  | S ) + 6 outputs C) + 6 output C) + 6 output MET148-2  MSA141  be used with ACE949-2 ACE959 ACE969TP-2 ACE969FO-2 50 and Mod ACE850TP ACE850FO | h all the applic   | 59642<br>59642<br>59643<br>59644<br>C 60870-5<br>59723<br>59724<br>59754<br>59658<br>59659   | L L L L L L L L L L L L L L L L L L L | MES120G  | 59716<br>59722<br>59660<br>59661<br>59662<br>59662<br>59662<br>59712<br>59670<br>59663<br>59663 |   |
| Core balance CTs Core balance CT, Ø 120 mm Core balance CT, Ø 200 mm Interposing ring CT Core balance CT interface Note: only one core balance C' Note: core balance CTs can not CCA634. | CSH120 CSH200 CSH30 ACE990 T can be added to be used with | 59635<br>59636<br>59634<br>59672 | Modules Input / output r 14 inputs (24-25-14 inputs) (220-2-14 inputs) (210-14 | modules 50 V DC) 250 V DC 125  | MSA141  be used with  CE949-2  ACE949-2  ACE969FO-2  ACE969FO-2  ACE850FO  are option is  | h all the applic   | 59642<br>59642<br>59643<br>59644<br>C 60870-5<br>59724<br>59754<br>59658<br>59659<br>use TCP | L L L L L L L L L L L L L L L L L L L | MES120G  | 59716<br>59722<br>59660<br>59661<br>59662<br>59662<br>59662<br>59712<br>59670<br>59663<br>59663 |   |

Note: the total number of communication interfaces cannot exceed 2.

## Ready-to-use configuration

| From:<br>Country:<br>Fax:                            |                  |                | Cu                            |            |                |                       |             |              |           |                 |                |          |
|--|------------------|----------------|-------------------------------|------------|----------------|-----------------------|-------------|--------------|-----------|-----------------|----------------|----------|
| Number of identical Sepan configurations ordered:    |                  |                | С                             | heck th    | e boxes X      | or indicate           | e the requ  | uired quanti |           |                 |                |          |
| Fax:   |                  |                |                               |            |                |                       |             |              |           |                 |                |          |
|  | CED000           | 50705          |                               |            |                | _                     |             | LDCT         | B2 sen    | isor            |                |          |
|  |                  |                | Substation                    |            |                |                       |             |              |           |                 |                |          |
|  |                  |                |                               |            |                |                       |             |              |           |                 |                |          |
|  |                  |                |                               |            |                |                       |             |              |           |                 |                |          |
| Base unit without basic UMI                          | SEP080           | 59703          | Transformer                   | T81        | 59733          | СТ                    | СТ          | LPCT         |           |                 |                |          |
| Remote advanced                                      | DSM303           | 59608          |                               | T82        | 59734          | СТ                    | СТ          | LPCT         |           |                 |                |          |
| UMI module (compulsory v                             | with SEP080)     |                |                               | T87        | 59735          | СТ                    | СТ          |              | СТ        | СТ              |                |          |
|  | CCA770           | 59660          | Motor                         | M81        | 59736          | СТ                    | СТ          | LPCT         |           |                 |                |          |
| E-2111   |                  |                |                               |            |                |                       |             | LPCT         |           |                 | LPCT           |          |
|  |                  |                |                               |            |                |                       |             |              | СТ        | СТ              |                |          |
|  |                  | 59706          | Generator                     |            |                |                       |             |              |           |                 |                |          |
|  |                  |                |                               |            |                |                       |             | LPCT         |           |                 | LPCT           |          |
|  | MMCOOO           | 50707          | Puchar                        |            |                |                       |             | LDCT         | CI        | CI              |                |          |
|  |                  |                | busbai                        |            |                |                       |             | LPCI         |           |                 |                | VT       |
|  |                  |                | Capacitor                     |            |                |                       |             | LPCT         | СТ        | СТ              |                |          |
|  |                  |                |                               |            |                |                       |             |              | Ŭ.        | O.              |                |          |
| <u> </u>   | 7 - 5            |                | ouotozod                      |            |                |                       |             |              | СТ        | СТ              | LPCT           |          |
|  |                  | 59709          |                               |            |                |                       |             |              |           |                 |                | VT       |
|  |                  | 59710          | Customized refe               | erence ni  | umber          | 59630                 | 59629       | 59702        | 59630     | 59629           | 5970           | 2 5963   |
| Connectors   |                  |                |                               | ]-□        |                | CCA630                | CCA634      | CCA671       | CCA630    | CCA634          | CCA67          | '1 CCT64 |
| Type Screw-type                                      | CCA620           | 59668          |                               |            |                | Note: CCA             | 630 : 1A/5  | A CT curren  | t connect | or              |                |          |
| Core balance CTs                                     |                  |                | Input / output                |            |                |                       |             |              | N 45      | -0.100          | 50745          |          |
| Core balance CT, Ø 120 mm  Core balance CT, Ø 200 mm | CSH120<br>CSH200 | 59635<br>59636 | 14 inputs (24-2               |            |                |                       |             |              |           | ES120<br>ES120G | 59715<br>59716 |          |
| Interposing ring CT                                  | CSH200           | 59634          | 14 inputs (220                |            | · ·            |                       |             |              |           | ES120H          | 59722          |          |
| Core balance CT interface                            | ACE990           | 59672          | Note: the Sep                 |            |                |                       | 3 input/out | put modules  |           |                 |                |          |
| Note: only one core balance C7                       | can be added     | 1.             | Remote modu                   | ules       |                |                       |             | Cor          | nnection  | cord            |                |          |
| Note: core balance CTs can no                        | t be used with   | connector      | 8 temperature                 | sensor     | MET148-2       | 5                     | 9641        | L =          | 0.6 m CC  | CA770           | 59660          |          |
| CCA634.  |                  |                | module                        |            |                |                       | '           | L =          | 2 m CC    | CA772           | 59661          |          |
|  |                  |                |                               |            |                |                       |             |              | 4 m CC    | CA774           | 59662          |          |
|  |                  |                | Note: the ME<br>Maximum of 2  |            |                |                       |             | , G and C.   |           |                 |                |          |
|  |                  |                |                               |            |                | - ''                  | 9647        | 1 -          | 0.6 m CC  | 24770           | 59660          |          |
|  |                  |                | Analog output                 | module     | WOATHT         |                       | 13041       |              |           | CA772           | 59661          | _        |
|  |                  |                |                               |            |                |                       |             | _            |           | CA774           | 59662          |          |
|  |                  |                | Note: the MS                  | A141 ca    | n be used with | all the applica       | ations.     |              |           |                 |                |          |
|  |                  |                | Synchro-check                 | k module   | )              |                       |             |              | MC        | CS025           | 59712          |          |
|  |                  |                |                               | nting plat |                |                       |             |              | A۱        | ЛТ840           | 59670          |          |
|  |                  |                | Note: the MC<br>Comes with co |            |                |                       |             |              |           |                 |                |          |
| Communication interfaces                             |                  |                | Modbus inter                  | faces      |                |                       |             | Cor          | nnection  | cord            |                |          |
|  |                  |                | 2-wire RS 485                 | interfac   | ACE949-2       | 5                     | 9642        |              | CC        | CA612           | 59663          |          |
|  |                  |                | 4-wire RS 485                 | interfac   | ACE959         | 5                     | 9643        |              | CC        | CA612           | 59663          |          |
|  |                  |                | Fiber optic inte              | erface     | ACE937         | 5                     | 9644        |              | CC        | CA612           | 59663          |          |
|  |                  |                | Multi-protoco                 | l interfa  | ces (Modbus,   | DNP3 or IEC           | 60870-5-1   | 03)          |           |                 |                |          |
|  |                  |                | 2-wire RS 485                 | interfac   | ACE969TP-2     | 5                     | 9723        |              | CC        | CA612           | 59663          |          |
|  |                  |                | Fiber optic inte              | erface     | ACE969FO-2     | 5                     | 9724        |              | CC        | CA612           | 59663          |          |
|  |                  |                | TCP/IP interfa                | ices (61   | 850 and Modb   | ous TCP)              |             |              |           |                 |                |          |
|  |                  |                | TCP/IP firmwa                 | re optior  | 1              | 5                     | 9754        |              |           |                 |                | Ш        |
|  |                  |                | 2 RJ45 interfa                | ce         | ACE850TP       | 5                     | 9658        |              |           |                 |                | Ш        |
|  |                  |                | Fiber optic inte              | erface     | ACE850FO       | 5                     | 9659        |              |           |                 |                | Ш        |
|  |                  |                | Note: A speci                 | fic firme  | ware option is | mandatory to          | use TCP/II  | o interfaces |           |                 |                |          |
|  |                  |                | Note: The cor                 |            |                |                       | TP and FC   | ) interfaces |           |                 |                |          |
|  |                  |                | Matar Outre                   | A ACEO     | EO TO as EO is | 40 mf 0 0 0 0 0 0 = C | `anam       |              |           |                 |                |          |

Note: the total number of communication interfaces cannot exceed 2.

#### Sepam serie 80 NPP

## Ready-to-use configuration

|   |   |  |                                  |   | <u> </u>  |  |  |                                 |   |   |           |   |       |
|---|---|--|----------------------------------|---|---|--|--|---------------------------------|---|---|-----------|---|-------|
| From:   |   |  |                                  | C   |   | number:  |  |                                 |   |   |           |   |       |
| Country:<br>Fax:  |   |  |                                  | CI  | ustomer   | r's code:<br>Page:   | 1  |                                 |   |   |           |   |       |
| ı ax.   |   |  |                                  |   |   | r age.   |  |                                 |   |   |           |   |       |
| Number of ide   | entical Sepam   | ı <u> </u>   |                                  | This order fo   | rm can  | be used to   | define a comp  | olete Sep                       | am config                                 | juration.   |           |   |       |
| configuration   | s ordered:  |  |                                  |   |   | ne boxes X   |  |                                 |   | ntities   |           |   |       |
|   |   |  |                                  | in the app  | ropriate  | spaces   | according  | to your c                       | hoices.                                   |   |           |   |       |
| Sanam sar   | riae 80 hae <i>e</i>  | a unit cartrid                                       | lge, connecto                    | re and annli  | cation  |  |  |                                 |   |   |           |   |       |
| Base unit and   |   | o anni, carino                                       | ige, connecto                    | Application   |   | уре  | B1 sensor  |                                 |   | B2 sensor   |           |   |       |
| Base unit with m  | nimic-based UMI   | SEP888NPP  | 59705NPP                         | Substation  | S80   | 59729  | СТ   | СТ                              | LPCT                                      |   |           |   |       |
| Base unit with a  |   | SEP383NPP  | 59704NPP                         |   | S81   | 59730  | СТ   | СТ                              | LPCT                                      |   |           |   |       |
|   | seal accessory (<br>d only with an ad   |  | 59639                            |   | S82<br>S84  | 59731<br>59732   | CT<br>CT   | CT                              | LPCT                                      |   |           |   |       |
| Base unit without   |   | SEP080   | 59703                            | Transformer   | T81   | 59732  | СТ   | CT                              | LPCT                                      |   |           |   |       |
| Remote a  |   | DSM303   | 59608                            |   | T82   | 59734  | СТ   | СТ                              | LPCT                                      |   |           |   |       |
| UMI modu  | ule (compulsory v   | with SEP080)   |                                  |   | T87   | 59735  | СТ   | СТ                              |   | СТ  | СТ        |   |       |
|   | on L = 0.6 m  | CCA770   | 59660                            | Motor   | M81   | 59736  | СТ   | CT                              | LPCT                                      | -   |           |   | _     |
| cord  | L = 2 m<br>L = 4 m  | CCA772<br>CCA774                                     | 59661<br>59662                   |   | M87<br>M88  | 59737<br>59738   | CT<br>CT   | CT                              | LPCT                                      | CT  | CT<br>CT  | LPCT  | _     |
| Mounting  |   | AMT880   | 59706                            | Generator   | G82   | 59739  | СТ   | СТ                              | LPCT                                      | 01  | O.        |   |       |
|   | ng clips included   |  |                                  |   | G87   | 59741  | СТ   | СТ                              | LPCT                                      | СТ  | СТ        | LPCT  |       |
| Memory cartrid  | ~   |  |                                  |   | G88   | 59742  | СТ   | СТ                              |   | СТ  | СТ        |   |       |
|   | ge series 80 NPP  |  | 59707NPP                         | Busbar  | B80   | 59743  | CT   | CT                              | LPCT                                      |   |           |   | VCT   |
| Note: option red  | quired to use Log   | SFT080   | 59711                            | Capacitor   | B83<br>C86  | 59744<br>59745   | CT<br>CT   | CT                              | LPCT                                      | СТ  | СТ        |   | VT    |
| Working langua  |   | ,, pg  |                                  | Сараслог  |   | 007.10   | 59630  |                                 |   |   |           | 59702   | 5963  |
| Sepam serie 80  | EN / FR NPP   |  | 59709NPP                         |   | -   |  | CCA630   | CCA634                          | CCA6                                      | 71 CCA63  | 30 CCA634 | CCA671  | CCT64 |
|   | EN / ES NPP   |  | 59710NPP                         |   |   |  | Note: CCA  | 630 : 1A/                       | 5A CT curre                               | ent connector   |           |   |       |
|   | EN / CH NPP   |  | 59840NPP<br>59841NPP             |   |   |  |  |                                 |   |   |           |   |       |
|   | EN / OTHER  |  | 59841NPP<br>59842NPP             |   |   |  |  |                                 |   |   |           |   |       |
|   | EN / OTHER  |  | 59843NPP                         |   |   |  |  |                                 |   |   |           |   |       |
| Connectors  |   |  |                                  |   |   |  |  |                                 |   |   |           |   |       |
| Туре  | Screw-type  | CCA620   | 59668                            |   |   |  |  |                                 |   |   |           |   |       |
|   | Ring-lug type   | CCA622   | 59669                            |   |   |  |  |                                 |   |   |           |   |       |
| Modules, o  | communica   | ntion interfac                                       | es, core balan                   | ce CTs and  | shipp   | oing certi   | ficat  |                                 |   |   |           |   |       |
| Core balance  | CTs   |  | es, core balan                   | Modules   |   |  | ficat  |                                 |   | _   | _         |   |       |
|   | CTs<br>T, Ø 120 mm  | CSH120<br>CSH200                                     |                                  |   | t module  | es   |  |                                 | _   | MES120NPF   |           | 59715NPP  |       |
| Core balance  | T, Ø 120 mm<br>T, Ø 200 mm  | CSH120<br>CSH200<br>CSH30                            | 59635<br>59636<br>59634          | Modules<br>Input / output<br>14 inputs (24-<br>14 inputs (220   | t module<br>250 V De<br>0-250 V D   | es<br>C) + 6 outputs<br>DC) + 6 outpu  | NPP  | _                               | _   | MES120GNF   | PP        | 59716NPP  |       |
| Core balance Core | T, Ø 120 mm T, Ø 200 mm CT T interface  | CSH120<br>CSH200<br>CSH30<br>ACE990                  | 59635<br>59636                   | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110   | t module<br>250 V De<br>0-250 V E<br>0-125 V E  | es<br>C) + 6 outputs<br>CC) + 6 outpu<br>CC) + 6 outpu   | NPP<br>ts NPP  | 3 input/ou                      | itbut modul                               | MES120GNF<br>MES120HNF  | PP        |   |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110   | t module<br>250 V DO<br>0-250 V D<br>0-125 V D  | es<br>C) + 6 outputs<br>CC) + 6 outpu<br>CC) + 6 outpu   | NPP<br>ts NPP  | 3 input/ou                      |   | MES120GNF   | PP        | 59716NPP  |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990                  | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110 Note: the Sep Remote mod  | t module<br>250 V D0<br>0-250 V D<br>0-125 V D<br>0am base<br>ules  | es<br>C) + 6 outputs<br>CC) + 6 output<br>CC) + 6 output<br>e unit comes   | NPP<br>Is NPP<br>Is NPP<br>with 5 outputs;   | 3 input/o.                      |   | MES120GNF MES120HNF les can be added. connection cord = 0.6 m CCA770  | PP        | 59716NPP<br>59722NPP<br>59660   |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110 Note: the Sep Remote mod  | t module<br>250 V D0<br>0-250 V D<br>0-125 V D<br>0am base<br>ules  | es<br>C) + 6 outputs<br>CC) + 6 output<br>CC) + 6 output<br>e unit comes   | NPP<br>Is NPP<br>Is NPP<br>with 5 outputs;   |                                 |   | MES120GNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA772  | PP        | 59716NPP<br>59722NPP<br>59660<br>59661  |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110 Note: the Sep Remote mod 8 temperature module   | t module<br>250 V DO<br>0-250 V E<br>0-125 V E<br>poam base<br>ules   | es C) + 6 outputs C) + 6 outpu C) + 6 outpu C) + 6 outpu e unit comes MET148-2   | NPP<br>Is NPP<br>Is NPP<br>with 5 outputs;   | 9641                            |   | MES120GNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774   | PP        | 59716NPP<br>59722NPP<br>59660   |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110 Note: the Sep Remote module Note: the ME  | t module<br>250 V D0<br>-250 V E<br>0-125 V E<br>pam base<br>ules<br>a sensor   | es C) + 6 outputs C) + 6 output C) + 6 output C) + 6 output e unit comes MET148-2 can be used o  | NPP IS NPP IS NPP With 5 outputs;  | 9641                            |   | MES120GNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774   | PP        | 59716NPP<br>59722NPP<br>59660<br>59661  |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220- 14 inputs (110 Note: the Ser Remote module  Note: the ME Maximum of 2 Analog output   | t module<br>250 V DO<br>-250 V E<br>0-125 V E<br>pam base<br>ules<br>s sensor   | es C) + 6 outputs C) + 6 output C) + 6 output C) + 6 output e unit comes MET148-2 can be used o  | NPP Is NPP Is NPP with 5 outputs;  5!  nly with application.   | 9641                            |   | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770   | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660  |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2  | t module<br>250 V DO<br>-250 V E<br>0-125 V E<br>pam base<br>ules<br>s sensor   | es C) + 6 outputs C) + 6 outputs C) + 6 output C) + 6 output e unit comes MET148-2 can be used of 8-2 modules  | NPP Is NPP Is NPP with 5 outputs;  5!  nly with application.   | 9641                            |   | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA772  | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661   |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (210 14 inputs (110 Note: the Ser Remote module  Note: the ME Maximum of 2 Analog output module   | t module<br>250 V D0<br>2-250 V E<br>0-125 V E<br>pam base<br>ules<br>s sensor<br>2 MET 14  | es<br>C) + 6 outputs<br>C) + 6 outpu<br>DC) + 6 outpu<br>e unit comes of<br>MET148-2<br>can be used of<br>8-2 modules of<br>MSA141   | NPP Is NPP Is NPP Is NPP With 5 outputs;  5!  Inly with application.   | 9641 ations T, N                |   | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770   | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660  |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec  | t module<br>250 V D0<br>0-250 V E<br>0-125 V   | es C) + 6 outputs C) + 6 output C) + 6 outpu e unit comes MET148-2  can be used of 8-2 modules MSA141  In be used with   | NPP Is NPP Is NPP with 5 outputs;  5!  nly with application.   | 9641 ations T, N                |   | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025  | PP        | 59716NPP<br>59722NPP<br>59600<br>59661<br>59662<br>59660<br>59661<br>59662  |       |
| Core balance Core | CTs T, Ø 120 mm T, Ø 200 mm CT T interface core balance CT                          | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (210 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour   | t module 250 V D0 250 V E 0-125 V E   | es C) + 6 outputs CC) + 6 output CC) + 6 output CC) + 6 output CC) + 6 output e unit comes CMET148-2  CAN be used comes CME-2 modules (MSA141)  In be used with CO CME CME-2 modules (MSA141)  The be used with CO CME CME-2 modules (MSA141)  The be used with CO CME CME-2 modules (MSA141)  The be used with CO CME   | NPP Is NPP Is NPP Is NPP with 5 outputs;  5:  nly with application.  5 In all the application.   | 99641 Attions T, M              | 1, G and C.                               | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA774  = 4 m CCA770 = 4 m CCA770  | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662  |       |
| Core balance Core | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (110 Note: the Ser Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC  | t module<br>250 V DO<br>-250 V E<br>-125 V E<br>-125 V E<br>-125 V E<br>-125 V E<br>-125 V E<br>-126 V E<br>-12 | ESC) + 6 outputs C) + 6 outputs C) + 6 output C) + 6 output D) + 6 outpu | NPP Is NPP Is NPP Is NPP With 5 outputs;  5!  Inly with application.   | 99641                           | L L L L L L L L L L L L L L L L L L L     | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025  | PP        | 59716NPP<br>59722NPP<br>59600<br>59661<br>59662<br>59660<br>59661<br>59662  |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (110 Note: the Ser Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC  | t module 250 V D 0-250 V E 0-125 V E  | ESC) + 6 outputs C) + 6 outputs C) + 6 output C) + 6 output D) + 6 outpu | NPP Is NP | 99641                           | L L L L L C C C C C C C C C C C C C C C   | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025  | PP        | 59716NPP<br>59722NPP<br>59600<br>59661<br>59662<br>59660<br>59661<br>59662  |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  | t module 250 V D0 250 V E 250   | es C) + 6 outputs C) + 6 output DC) + 6 output DC) + 6 output e unit comes MET148-2  Can be used of RS-2 modules MSA141  In be used with Delta on the used only In cord CCA78  | NPP Is NP | 99641                           | L L L L L C C C C C C C C C C C C C C C   | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840                            | PP        | 59716NPP<br>59722NPP<br>59600<br>59661<br>59662<br>59660<br>59661<br>59662  |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24-14 inputs (22-14 inputs (210 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  | t module 250 V D0 250 V E 250   | es C) + 6 outputs C) + 6 output DC)  | NPP Is NPP Is NPP Is NPP with 5 outputs;  full with application.  full the application with application and the application of  | ations T, A<br>19647<br>ations. | L L L L L C C C C C C C C C C C C C C C   | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA770 = 2 m CCA774  MCS025 AMT840  | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670                            |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Nodules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with or  Modbus inter 2-wire RS 485 Fiber optic inter  | t module 250 V D0 250 V E 250   | C) + 6 outputs C) + 6 outputs C) + 6 output  | NPP Is NPP Is NPP Is NPP Is NPP With 5 outputs;  5! Inly with application.  5 In all the application.  5 In all the application of the application of the application.  5 Is a control of the application of the application.  | 9641                            | L   L   L   L   L   L   C   C   C   C     | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  = 0.6 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840  connection cord CCA612 | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670                            |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Nodules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with or  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protoco   | t module 250 V D0 250 V E 250   | C) + 6 outputs C) + 6 outputs CC) + 6 output CC) +  | NPP Is NPP Is NPP Is NPP Is NPP With 5 outputs;  5:  Inly with application.  5 In all the application.  5 In all the application and voltage in the second | 9641                            | L   L   L   L   L   L   C   C   C   C     | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840  Connection cord CCA612 CCA612 CCA612                | PP        | 59716NPP<br>59722NPP<br>59600<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663          |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (210 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with or  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protoco 2-wire RS 485  | t module 250 V D0 2-250 V E 2-250 V   | es C) + 6 outputs C) + 6 outputs C) + 6 outputs C) + 6 outputs e unit comes MET148-2  can be used of RSA141  In be used with Comes ACE949-2 ACE959 ACE937 ICES (Modbus ACE969TP-2  | NPP Is NPP Is NPP Is NPP Is NPP Is NPP Is NPP With 5 outputs;  5! Inly with application.  5 In all the application.  5 Is and voltage Is 5  | 9641                            | L   L   L   L   L   L   L   L   L   L     | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840  connection cord CCA612 CCA612 CCA612                 | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Nodules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with or  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protoco   | t module 250 V D0 2-250 V E 2-250 V   | construction of the constr | NPP Is NP | 9641                            | L   L   L   L   L   L   L   L   L   L     | MES120GNF MES120HNF MES120HNF des can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840  Connection cord CCA612 CCA612 CCA612                | PP        | 59716NPP<br>59722NPP<br>59600<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663          |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (210 14 inputs (110 Note: the Ser Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co   | t module 250 V D0 2-250 V E 2-250 V   | es C) + 6 outputs C) + 6 outputs C) + 6 outputs C) + 6 outputs e unit comes MET148-2 Can be used of 8-2 modules MSA141  In be used with Cord CCA78  ACE949-2 ACE959 ACE937 ACE969TP-2 ACE969FO-2 850 and Mod   | NPP Is NP | 9641                            | L   L   L   L   L   L   L   L   L   L     | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840  connection cord CCA612 CCA612 CCA612                 | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (210 14 inputs (210 14 inputs (110 Note: the Ser Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  | t module 250 V D0 2-250 V E0 2-25  | es C) + 6 outputs C) + 6 outputs C) + 6 outputs C) + 6 outputs e unit comes MET148-2 Can be used of 8-2 modules MSA141  In be used with Cord CCA78  ACE949-2 ACE959 ACE937 ACE969TP-2 ACE969FO-2 850 and Mod   | NPP Is NP | 9641                            | L   L   L   L   L   L   L   L   L   L     | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840  connection cord CCA612 CCA612 CCA612                 | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 18 Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protocc 2-wire RS 485 Fiber optic inter TCP/IP interfire TCP/IP firmwar   | t module 250 V D0 2-250 V E0 2-25  | es C) + 6 outputs C) + 6 outputs C) + 6 outputs C) + 6 outputs e unit comes of MET148-2 Can be used of B-2 modules of MSA141  In be used with Cord CCA78  ACE949-2 ACE959 ACE937 ACE969F0-2 ACE969F0-2 ACE969F0-2 ACE969F0-2 ACE969F0-2 ACE850TP   | NPP Is NP | 9641                            | L   L   L   L   L   L   L   L   L   L     | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA772 = 4 m CCA774  MCS025 AMT840  connection cord CCA612 CCA612 CCA612                 | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (220- 14 inputs (110) Note: the Ser Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protocc 2-wire RS 485 Fiber optic interfat TCP/IP interfat TCP/IP firmwa 2 RJ45 interfat Fiber optic interfat | t module 250 V D0 2-250 V E0 2-25  | es C) + 6 outputs C) + 6 outputs C) + 6 output e unit comes of MET148-2  Can be used of B-2 modules MSA141  In be used with Correct of CA78  ACE949-2  ACE959  ACE937  ACE969F0-2  ACE969F0-2  BEOM Modules COM ACE850TP  ACE850FO Ware option is  | NPP Is NP | 9641                            | G and T.  CCT640.  C printerface          | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA774  MCS025 AMT840  COA612 CCA612 CCA612 CCA612 CCA612 CCA612                         | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (24- 14 inputs (210 14 inputs (110 Note: the Ser Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protocc 2-wire RS 485 Fiber optic inte TCP/IP interfat TCP/IP firmwa 2 RJ45 interfat Fiber optic inte Note: A spec Note: The co  | t module 250 V D0 2-250 V E0 2-25  | es C) + 6 outputs C) + 6 outputs C) + 6 output e unit comes of the com | NPP Is NP | 9641                            | G and T.  CCT640.  C printerface          | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA774  MCS025 AMT840  COA612 CCA612 CCA612 CCA612 CCA612 CCA612                         | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T, Ø 200 mm CT T interface core balance CT ance CTs can not | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (21- 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protoco 2-wire RS 485 Fiber optic inte TCP/IP firmwa 2 RJ45 interfa Fiber optic inte Note: A spec Note: The co Note: Only or   | t module 250 V D0 250 V E 250   | ESC) + 6 outputs CC) + 6 outpu | NPP Is NP | 9641                            | G and T. CCT640.  C interface C interface | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA774  MCS025 AMT840  COA612 CCA612 CCA612 CCA612 CCA612 CCA612                         | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |
| Core balance C Core balance C Interposing ring Core balance C Note: only one Note: core bala  Communicati   | T, Ø 120 mm T, Ø 200 mm T T T interface core balance CT ance CTs can not            | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (21- 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protoco 2-wire RS 485 Fiber optic inte TCP/IP firmwa 2 RJ45 interfa Fiber optic inte Note: A spec Note: The co Note: Only or   | t module 250 V D0 250 V E 250   | ESC) + 6 outputs CC) + 6 outpu | NPP Is NP | 9641                            | G and T. CCT640.  C interface C interface | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA774  MCS025 AMT840  COA612 CCA612 CCA612 CCA612 CCA612 CCA612                         | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |
| Core balance  | T, Ø 120 mm T, Ø 200 mm T T T interface core balance CT ance CTs can not            | CSH120<br>CSH200<br>CSH30<br>ACE990<br>Can be added. | 59635<br>59636<br>59634<br>59672 | Modules Input / output 14 inputs (24- 14 inputs (22- 14 inputs (21- 14 inputs (110 Note: the Sep Remote module  Note: the ME Maximum of 2 Analog output module  Note: the MS Synchro-chec Mour Note: the MC Comes with co  Modbus inter 2-wire RS 485 Fiber optic inte Multi-protoco 2-wire RS 485 Fiber optic inte TCP/IP firmwa 2 RJ45 interfa Fiber optic inte Note: A spec Note: The co Note: Only or   | t module 250 V D0 250 V E0 250  | ESC) + 6 outputs CC) + 6 outpu | NPP Is NP | 9641                            | G and T. CCT640.  C interface C interface | MES120GNF MES120HNF MES120HNF es can be added. connection cord = 0.6 m CCA770 = 2 m CCA774  = 0.6 m CCA770 = 2 m CCA774  MCS025 AMT840  COA612 CCA612 CCA612 CCA612 CCA612 CCA612                         | PP        | 59716NPP<br>59722NPP<br>59660<br>59661<br>59662<br>59660<br>59661<br>59662<br>59712<br>59670<br>59663<br>59663<br>59663 |       |

## Sepam accessories and spare parts

| From: Order nu  | mber          |  |
|---|---------------|--|
| Country: Customer's   |               |  |
| _ *   | Page:         | /  |
| Indicate the required quantities in the appropriat  | e spaces      | according to your choices.                 |
| Mounting accessories  |               |  |
| Sepam series 20, Sepam series 40 or MCS025:   |               |  |
| Mounting plate  | AMT           | T840 <b>59670</b>                          |
| Sepam series 20, Sepam series 40, Sepam series 60 and Sepam se                                    | ries 80 wi    | ith advanced UMI                           |
| Mead seal accessory   | AMT           | T852 <b>59639</b>                          |
| Sepam series 60 and Sepam series 80   |               |  |
| Mounting plate  |               | T880 <b>59706</b>                          |
| Blanking plate  | AMI           | T820 <b>59699</b>                          |
| Software tools  | C 4 70′ C D 9 | SET 29.44 F06.70                           |
| Sepam PC software: SFT2841 and SFT2826 (CD-ROM without connection cord C PC cord RS232 connection |               | SFT2841 <b>59679</b> A783 <b>59664</b>     |
| PC cord USB connection  |               | A784 <b>59700</b>                          |
| USB/RS232 Interface (CCA783 cord must be ordered separetely)                                      | 00/           | TSXCUSB232                                 |
| Sepam PC software: SFT2885 (order is not possible without previous training)                      | CD S          | SFT2885 <b>59727</b>                       |
| IEC61850 configuration software (available in 2008)   |               | SFT850 <b>59726</b>                        |
| Input / output modules  |               |  |
| Sepam series 20 and series 40   |               |  |
| 10 inputs + 4 outputs, 24-250 V DC  |               | S114 <b>59646</b>                          |
| 10 inputs + 4 outputs, 110-125 V DC / V AC  |               | S114E <b>59651</b>                         |
| 10 inputs + 4 outputs, 220-250 V DC / V AC  | MES           | S114F 59652                                |
| Sepam series 60 and series 80   |               | 242  |
| 14 inputs + 6 outputs, 24-250 V DC  |               | \$120 <b>59715</b>                         |
| 14 inputs + 6 outputs, 220-250 V DC  14 inputs + 6 outputs 110-125 V DC                           |               | \$120G <b>59716</b><br>\$120H <b>59722</b> |
| Sepam series 80 NPP (High disponibility range)  | IVILO         | 33722                                      |
| 14 inputs + 6 outputs, 24-250 V DC NPP  | MES           | S120NPP <b>59715NPP</b>                    |
| 14 inputs + 6 outputs, 220-250 V DC NPP   |               | S120GNPP <b>59716NPP</b>                   |
| 14 inputs + 6 outputs 110-125 V DC NPP  | MES           | S120HNPF <b>59722NPP</b>                   |
| Remote modules and cords  |               |  |
| 8 temperature sensor module   | MET           | T148-2 <b>59641</b>                        |
| Analog output module  | MSA           | A141 <b>59647</b>                          |
| Remote advanced UMI module  |               | M303 <b>59608</b>                          |
| Synchro-check module (including connection cord CCA785)   |               | S025 <b>59712</b>                          |
| Remote module connection cord L = 0.6 m   |               | A770 <b>59660</b>                          |
| Remote module connection cord L = 2 m  Remote module connection cord L = 4 m                      |               | A772 <b>59661</b> A774 <b>59662</b>        |
| Synchro-check module connection cord  |               | A785 <b>59665</b>                          |
| L = 2 m (spare parts)   | 00.           |  |
| Communication accessories   |               |  |
| Sepam communication interfaces  |               |  |
| 2-wire RS 485 Modbus interface (without CCA612)   | ACE           | E949-2 <b>59642</b>                        |
| 4-wire RS 485 Modbus interface (without CCA612)   |               | E959 <b>59643</b>                          |
| Fiber optic Modbus interface (without CCA612)   |               | E937 <b>59644</b>                          |
| RS 485 multi-protocol 2-wire interface (without CCA612)   |               | E969TP-2 59723                             |
| Fiber optic multi-protocol interface (without CCA612)  Connection cord, L = 3 m                   |               | E969FO-2 <b>59724</b> A612 <b>59663</b>    |
| TCP/IP (61850 and Modbus TCP) 2 RJ45 interface (with CCA614)                                      |               | A612 <b>59663</b> E850TP <b>59658</b>      |
| TCP/IP (61850 and Modbus TCP) Fiber optic interface (with CCA614)                                 |               | E850FO <b>59659</b>                        |
| Connection cord, L = 3 m for TCP/IP(61850 and Modbus TCP) interfaces                              |               | A614 <b>59751</b>                          |
| Converters  |               | 1  |
| RS 232 / RS 485 converter   | ACE           | E909-2 <b>59648</b>                        |
| RS 485 / RS 485 interface (AC)  |               | E919CA <b>59649</b>                        |
| RS 485 / RS 485 interface (DC)  | ACE           | E919CC <b>59650</b>                        |
| Core balance CTs  |               |  |
| Core balance CT, Ø 120 mm   |               | H120 59635                                 |
| Core balance CT, Ø 200 mm   |               | H200 <b>59636</b>                          |
| Interposing ring CT Core balance CT interface   | CSF<br>ACE    | H30 <b>59634</b><br>E990 <b>59672</b>      |
|   | ACE           |  |
| Accessories for phase-current sensors (LPCT)  LPCT injection adapter                              | ۸۲۶           | E917 <b>59667</b>                          |
| Remote LPCT test plug   |               | A613 <b>59666</b>                          |
|   | 001           | 00000                                      |

## Sepam accessories and spare parts

| F  | rom:                    | Ord                | der number:      |                  |                |  |
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| Cou  | ıntry:                  |                    | Custo            | mer's code:      |                |  |
|  | Fax:                    |                    |                  | Page:            | /              |  |
|  |                         |                    |                  |                  | _              |  |
|  | oxes X or indicate th   | e required quantit | ties in the ap   | propriate spac   | es             |  |
| according to yo Spare connectors                                 | ur choices.             |                    |                  |                  |                |  |
| Sepam  |                         |                    |                  |                  |                |  |
| 20-pin screw-type connector                                      |                         |                    | (                | CCA620           | 59668          |  |
| 20-pin ring lug connector  |                         |                    | (                | CCA622           | 59669          |  |
| 6-pin screw-type connector                                       |                         |                    |                  | CCA626           | 59656          |  |
| 6-pin ring lug connector   |                         |                    |                  | CCA627           | 59657          |  |
| 1 A / 5 A CT current connector                                   |                         |                    |                  | CCA630           | 59630          | _  |
| A / 5A CT + I0 current connector  LPCT lateral current connector |                         |                    |                  | CCA634<br>CCA670 | 59629<br>59631 |  |
| LPCT radial current connector                                    |                         |                    |                  | CCA670<br>CCA671 | 59702          | _  |
| VT voltage connector   |                         |                    |                  | CCT640           | 59632          |  |
| MES modules  |                         |                    |                  |                  |                |  |
| Connectors for 2 MES114 and 2 MES120                             |                         |                    | ŀ                | Kit 2640         | 59676          |  |
| Spare Sepam series 60 and s                                      | series 80               |                    |                  |                  |                |  |
| series 60 base unit with mimic-based UMI                         |                         |                    |                  | SEP666           | 59837          |  |
| series 60 base unit with advanced UMI                            |                         |                    |                  | SEP363           | 59836          |  |
| series 60 base unit without UMI                                  |                         |                    | 5                | SEP060           | 59835          |  |
| series 80 base unit with mimic-based UMI                         |                         |                    | 5                | SEP888           | 59705          |  |
| series 80 base unit with advanced UMI                            |                         |                    | 5                | SEP383           | 59704          |  |
| series 80 base unit without UMI                                  |                         |                    | 9                | SEP080           | 59703          |  |
| 12 spring clips  |                         |                    |                  |                  | XBTZ3002       |  |
| TCP/IP firmware option   |                         |                    |                  |                  | 59754          |  |
| Note: the base units are supplied without co                     |                         | , ,                |                  |                  |                |  |
| Note: When ordering a base unit or a memo                        |                         |                    | this option is n | mandatory        |                |  |
| Spare Sepam series 60 and s                                      | series 80 memor         | y cartridge        |                  |                  |                |  |
| Memory cartridge   |                         |                    | N                | MMS020           | 59707          |  |
| Extended memory cartridge (series 80 only)                       |                         |                    | N                | MMR020           | 59701          |  |
| Note: the memory cartridge cannot be sold                        | without the application |                    |                  |                  |                |  |
| Application series 60  | Туре                    |                    | Working I        | anguage          |                |  |
|  |                         |                    | 59846            | 59847            | _              |  |
| Substation   | S60                     | 59787              | EN/FR            | EN/ES            |                |  |
|  | S62                     | 59789              | EN/FR            | EN/ES            |                |  |
| Transformer  | T60                     | 59790              | EN/FR            | EN/ES            |                |  |
|  | T62                     | 59791              | EN/FR            | EN/ES            |                |  |
| Motor  | M61                     | 59792              | EN/FR            | EN/ES            |                |  |
| Generator  | G60                     | 59793              | EN/FR            | EN/ES            |                |  |
|  | G62                     | 59794              | EN/FR            | EN/ES            |                |  |
| Capacitor  | C60                     | 59795              | EN/FR            | EN/ES            |                |  |
| Application series 80  | Туре                    |                    | Working I        | anguage          | Logipar        | n  |
|  | <u></u>                 |                    | 59709            | 59710            | 59711          |  |
| Substation   | S80                     | 59729              | EN/FR            | EN/ES            |                |  |
|  | S81                     | 59730              | EN/FR            | EN/ES            |                |  |
|  | S82                     | 59731              | EN/FR            | EN/ES            |                |  |
|  | S84                     | 59732              | EN/FR            | EN/ES            |                |  |
| Transformer  | T81                     | 59733              | EN/FR            | EN/ES            |                |  |
|  | T82                     | 59734              | EN/FR            | EN/ES            |                |  |
|  | T87                     | 59735              | EN/FR            | EN/ES            |                |  |
| Motor  | M81                     | 59736              | EN/FR            | EN/ES            |                |  |
|  | M87                     | 59737              | EN/FR            | EN/ES            |                |  |
|  | M88                     | 59738              | EN/FR            | EN/ES            |                |  |
| Generator  | G82                     | 59739              | EN/FR            | EN/ES            |                |  |
|  | G87                     | 59741              | EN/FR            | EN/ES            |                |  |
|  | G88                     | 59742              | EN/FR            | EN/ES            |                | $\dashv$   |
| Busbar   | B80                     | 59743              | EN/FR            | EN/ES            |                | +  |
|  | B83                     | 59744              | EN/FR            | EN/ES            |                | <del>                                     </del> |
| Capacitor  | C86                     | 59745              | EN/FR            | EN/ES            |                | _  |
| - apaonoi  | 000                     | 00170              | E-14/1-13        | L. 4/LO          | _              | -  |
| Customized   | Z81                     | 59747              | EN/FR            | EN/ES            |                |  |

| Z82 | 59748 | EN/FR | EN/ES |  |
|-----|-------|-------|-------|--|
| Z83 | 59749 | EN/FR | EN/ES |  |

Customized reference for series 80 only:

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| Spare Sepam advanced & mimic-based UMI replacement                 | t kit  |       |  |
|--|--------|-------|--|
| Kit advanced UMI series 20/40 (serial number < 0440001)            | SDK303 | 59694 |  |
| Kit advanced UMI series 20/40 (serial number > 0440001)            | SDK313 | 59695 |  |
| Kit advanced UMI series 60 & series 80                             | SDK383 | 59696 |  |
| Kit mimic-based UMI series 60 & series 80                          | SDK888 | 59697 |  |
| Kit UMI Tools  | SDK000 | 59698 |  |
| Note: the same kit can be used both Sepam series 20 and series 40. |        |       |  |

Note: a Kit UMI tools is mandatory for the UMI kit installation.