SITE-VISIT & REPAIR REPORT

1. INFORMATION

Project name	**Preventive maintenance replacement Digiplex Fetsund A1-3 A**
ABB representatives	**Didrik Hysing** **Christopher Kooij** **Svein Erik Andersen**
Work started / finished	**19.05.2020 - 26.05.2020**
Purpose of visit	**Planned maintenance**
Service order / project	
Comepany	**ABB AS,**
Country	**Norway**
E-mail address	Didrik.hysing@no.abb.com Svein-erik.andersen@no.abb.com Christopher.kooij@no.abb.com

2. CUSTOMER

Customer	**Digiplex Fetsund AS**
Customer PO number	**SJEKK TENDER**
Contact person	**Dag Oscar Brækken**
Address	**Heiaveien 9. 1900 Fetsund**
Country	**Norway**
E-mail address	**Dag Oscar Brækken <dobraekken@digiplex.com>**

3. INFORMATION

Type (typecode)	**ABB DPA 500**
Application	**Data Center**
TAG-number	**DFAS A1-3 A 1500kW**
Date of service	**19.05.2020 - 26.05.2020**

4. Representatives (On-Site)

ABB-Didrik Hysing
ABB-Svein Erik Andersen
ABB-Christopher Kooij

5. REPORT

Time	Description
Background	Maintenance was planned and performed in accordance with Manufacturer specifications. Performed by certified ABB Tech within the given time interval. Work was performed on 15 ABB DPA D5M 100kVA UPSs operating in parallel configuration. A total of 15 DPA D5M 100kVA units was serviced.
On site	**On Site Corrective Actions / Maintenance Performed at Digiplex Fetsund – A1-3 A site by ABB personnel** The following consumables were replaced on corresponding units in accordance with the manufacturer recommendation. **UPS 1. P01** A5M: 0474 P5M: 0465 **Article nr. / Description / Quantity** 00-9162 Fan - Active M 3 04-3427 Fan - Passive M 3 4NWP100455R0001 NW28061x Input Filter Passive M 1 4NWP100456R0001 NW28060x AC caps Passive M 1 4NWP100463R0001 NW28032x DC caps Active M 1 **UPS 2. P02** A5M: 0472 P5M: 0463 **Article nr. / Description / Quantity** 00-9162 Fan - Active M 3 04-3427 Fan - Passive M 3 4NWP100455R0001 NW28061x Input Filter Passive M 1 4NWP100456R0001 NW28060x AC caps Passive M 1 4NWP100463R0001 NW28032x DC caps Active M 1

UPS 3. P03
A5M: 1513
P5M: 1497

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 4. P04
A5M: 1557
P5M: 1567

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 5. P05
A5M: 1556
P5M: 1566

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 6. P06
A5M: 0473
P5M: 0464

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 7. P07
A5M: 0470
P5M: 0466

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 8. P08
A5M: 1516
P5M: 1503

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 9. P09
A5M: 1502
P5M: 1487

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 10. P10
A5M: 1542
P5M: 1553

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 11. P11
A5M: 0488
P5M: 0476

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 12. P12
A5M: 0758
P5M: 0477

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 13. P13
A5M: 0485
P5M: 1556

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 14. P14
A5M: 1514
P5M: 1502

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

UPS 15. P15
A5M: 1522
P5M: 1561

Article nr.	Description	Quantity
00-9162	Fan - Active M	3
04-3427	Fan - Passive M	3
4NWP100455R0001	NW28061x Input Filter Passive M	1
4NWP100456R0001	NW28060x AC caps Passive M	1
4NWP100463R0001	NW28032x DC caps Active M	1

After replacement, all functions and parameters were checked and tested. UPS started in local mode to verify full functionality.

UPS 1. P01
Input rectifier – OK
DC booster – OK
UDC Link +360/-360 – OK
Battery charger and discharge function – OK
Static bypass – OK
Inverter output voltage and wave – OK
Synchronization feature – OK
UPS startup normal mode, load protected – OK
Parallel operation – OK

UPS 2. P02
Input rectifier – OK
DC booster – OK
UDC Link +360/-360 – OK
Battery charger and discharge function – OK
Static bypass – OK
Inverter output voltage and wave – OK
Synchronization feature – OK
UPS startup normal mode, load protected – OK
Parallel operation – OK

UPS 3. P03
Input rectifier – OK
DC booster – OK
UDC Link +360/-360 – OK
Battery charger and discharge function – OK
Static bypass – OK
Inverter output voltage and wave – OK
Synchronization feature – OK
UPS startup normal mode, load protected – OK
Parallel operation – OK

	UPS 4. P04 Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 5. P05** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 6. P06** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 7. P07** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK

	UPS 8. P08 Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 9. P09** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 10. P10** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 11. P11** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK

	UPS 12. P12 Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 13. P13** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 14. P14** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK **UPS 15. P15** Input rectifier – OK DC booster – OK UDC Link +360/-360 – OK Battery charger and discharge function – OK Static bypass – OK Inverter output voltage and wave – OK Synchronization feature – OK UPS startup normal mode, load protected – OK Parallel operation – OK Preventive maintenance replacement completed. Next recommended preventive maintenance: year 2025-2026.

For **ABB AS**
Didrik Hysing
Mobile: +47 464 48 810

For **ABB AS**
Christopher Kooij
Mobile: +47 922 46 321