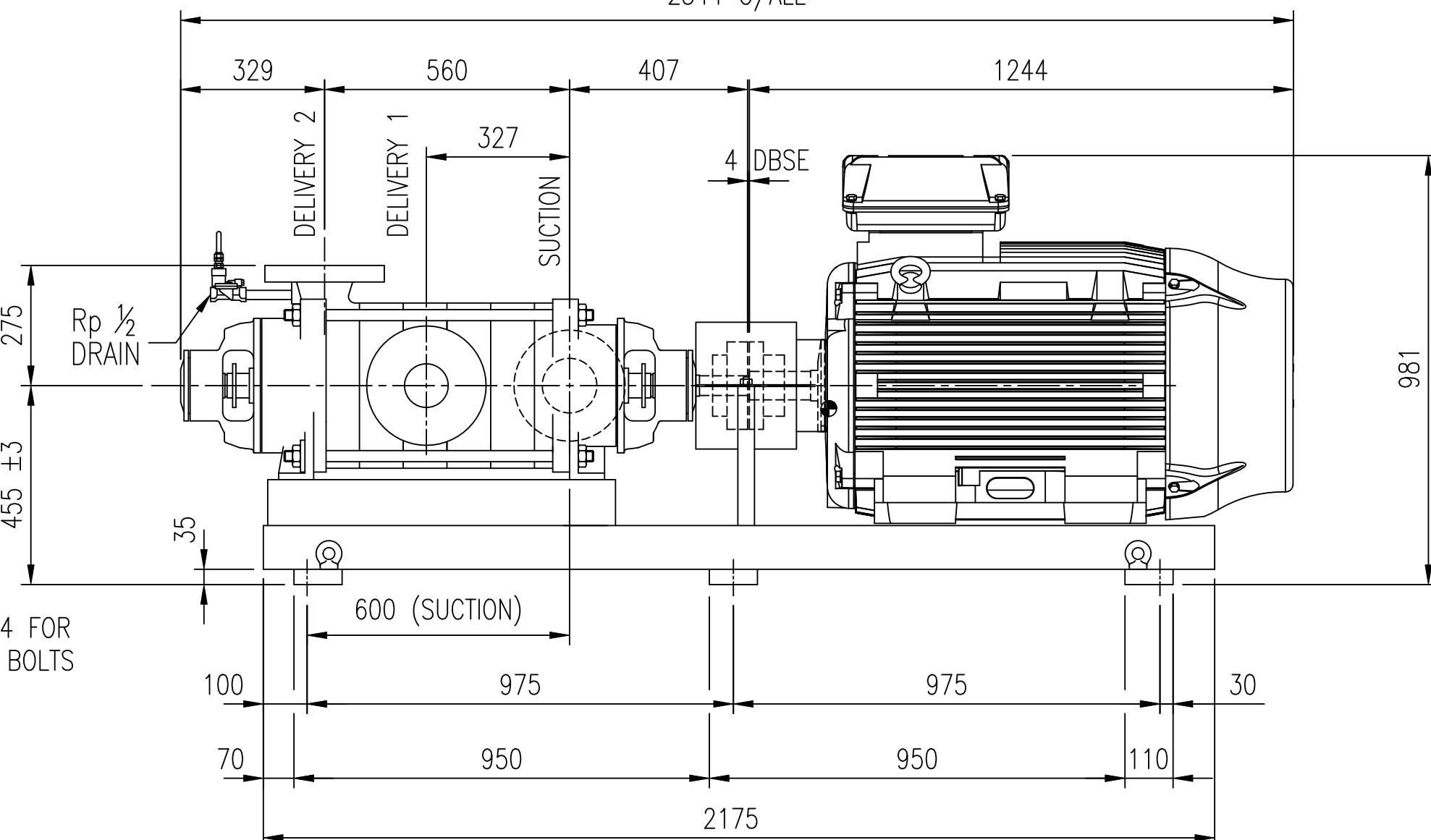


FX (N) SUCT	FY (N) SUCT	FZ (N) SUCT	MX (NM) SUCT	MY (NM) SUCT	MZ (NM) SUCT
DELY	DELY	DELY	DELY	DELY	DELY
1955	1420	2445	1160	1605	1780
1815	1330	930	680	1380	1000

ACCEPTABLE NOZZLE LOADS



NOTES :-

- 125 NOMINAL BORE SUCTION FLANGE DRILLED TO BS4504 PN10 FLAT FACE
- 100 NOMINAL BORE DELIVERY FLANGE DRILLED TO BS4504 PN40 FLAT FACE.
- CLOCKWISE ROTATION VIEWED ON PUMPSHAFT END

- APPROX WEIGHTS :-
PUMP 356 Kg
MOTOR 1142 Kg
COMPLETE UNIT 2000 Kg
- CofG APPROX. ●



DRN	JEC	12.08.15	COMPLETE UNIT
CHK	WINDCHILL	12.08.15	PUMP :RKB100/23E/5/2
APP'D	OJ	12.08.15	MOTOR : D315S&M
Drawn scale: Original W/O No.1526030			DESCRIPTION
			GENERAL ARRANGEMENT
1 Windchill	FIRST ISSUE	JEC AUG'15	FileName E65184-01.Dwg Border Size A3
ISS Rev N°	Revision Details	SIG & DATE	DRAWING NUMBER E65184-01

1

2

3

4

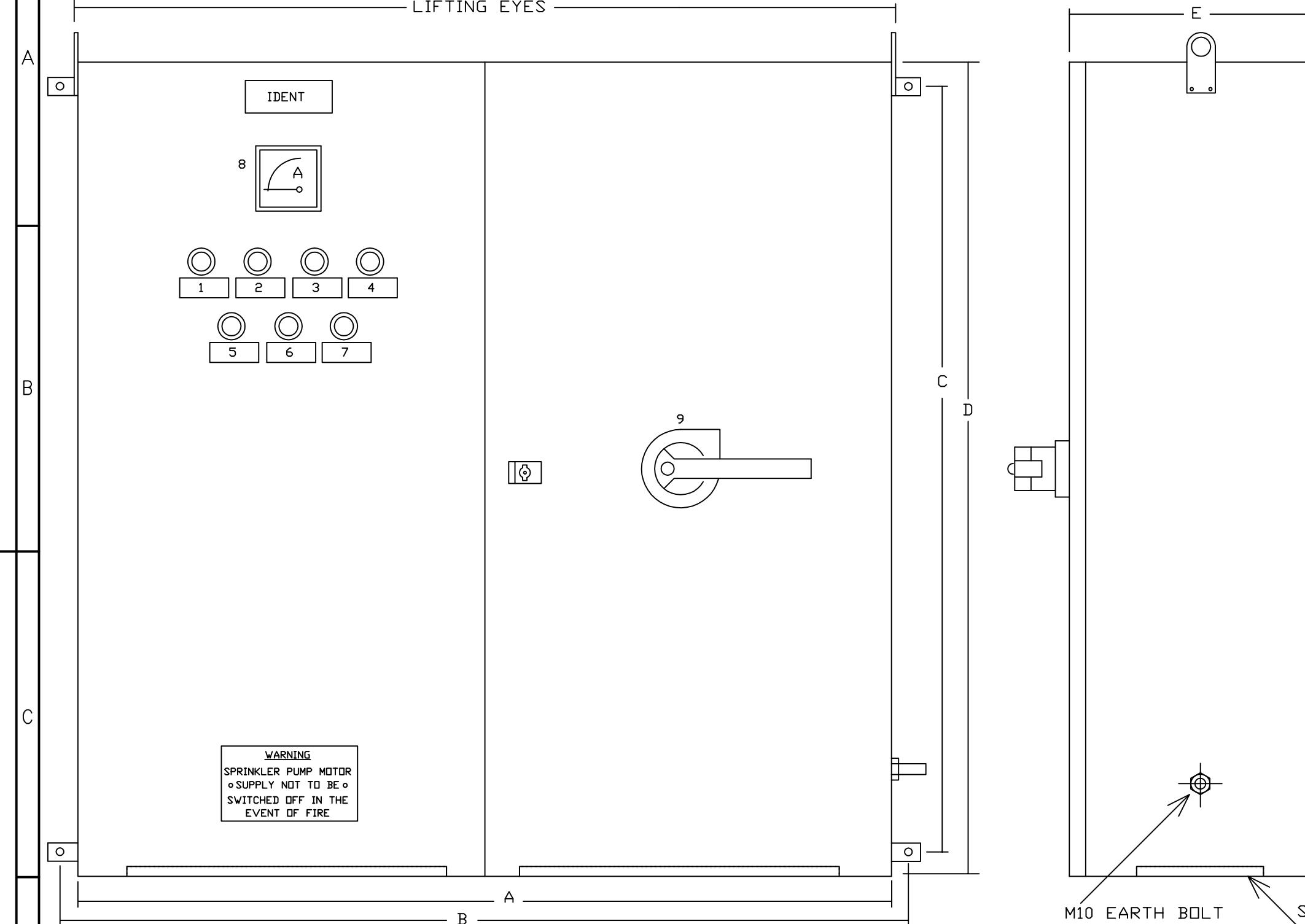
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UNTOLERANCED DIMENSIONS MUST COMPLY WITH SPP PUMPS LTD STD EDT PRA L02

THIRD ANGLE PROJECTION

FP500D-EN-4



1	R37991	FIRST ISSUE : MK3D ELECTRIC STARTER GA RANGE 132KW TO 185KW	DG 27.06.08
REV	Register No.	Revision Details	SIG & DATE



SPP PUMPS LTD.
THEALE CROSS, READING, BERKSHIRE, ENGLAND
RG31 7SP TEL +44 (0) 1189 323123

DRN	WAr	03.04.08
CHK	ELEYDENE	04.04.07
APP'D	D.G.	27.06.08

Drawn scale: NTS
Original W/O No.N/A

COMPLETE UNIT		
MK3 D STAR DELTA ELECTRIC		
STARTER - EN12845		
DESCRIPTION		
GENERAL ARRANGEMENT - 4		
FileName FP500D-EN-4.Dwg		
DRAWING NUMBER	FP500D-EN-4	

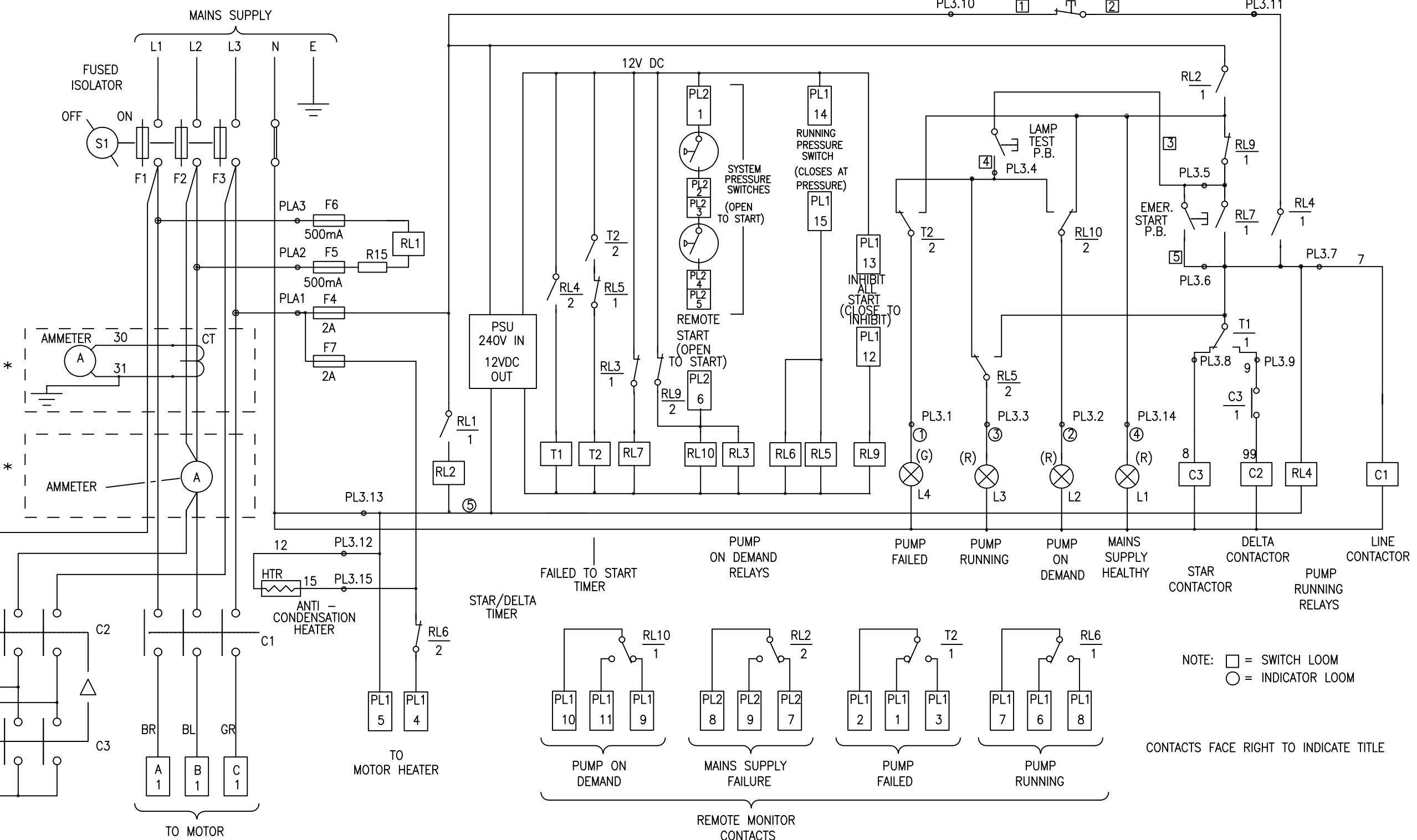
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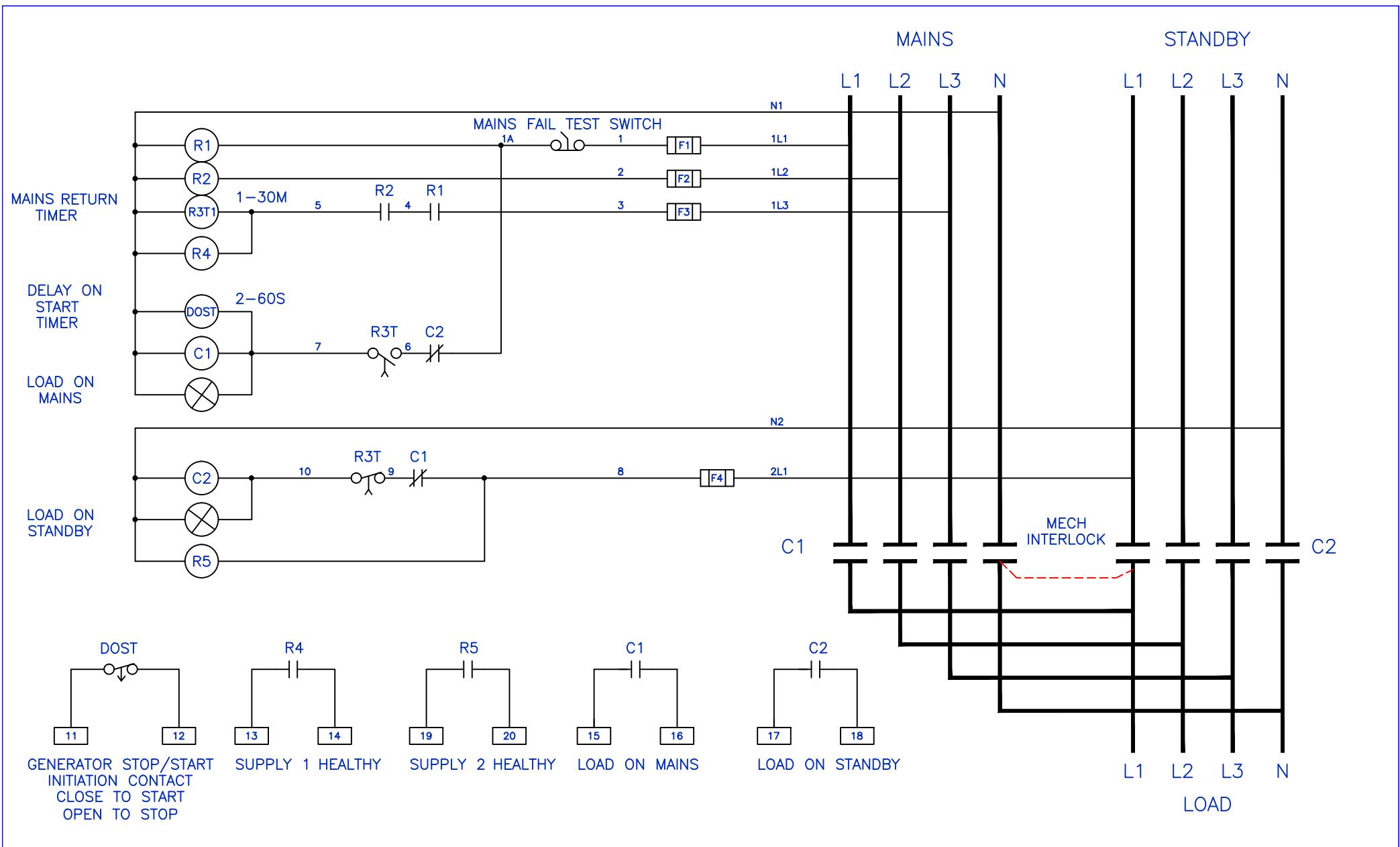
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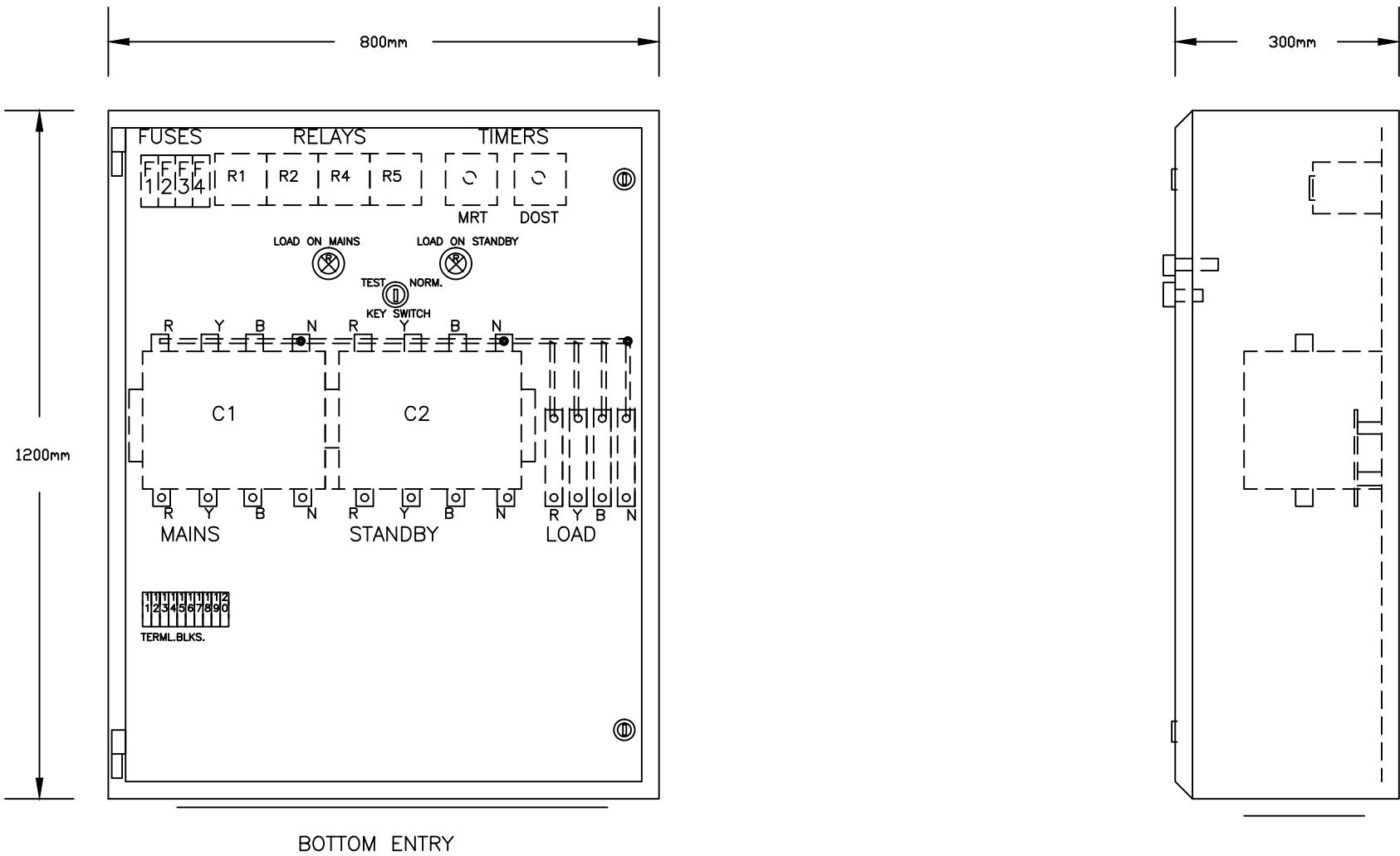
UNTOLERANCED DIMENSIONS MUST COMPLY WITH SPP PUMPS LTD STD EDT PRA L02

THIRD ANGLE PROJECTION

FW500D-EN







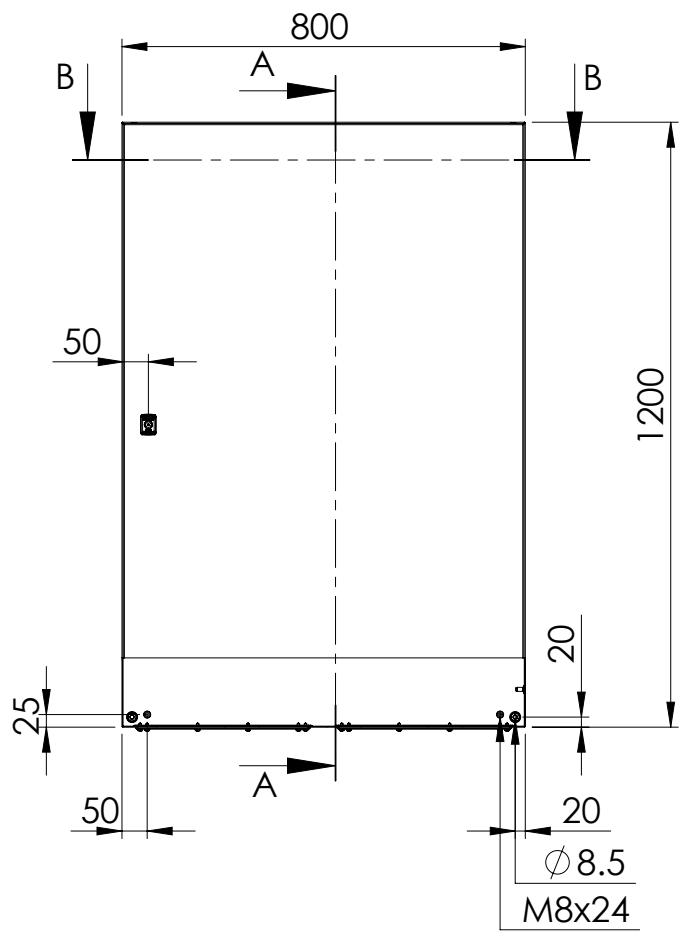
FOR GENERAL ARRANGEMENT ONLY, THIS IS NOT A SCALE ENGINEERING DRAWING
INTERNAL LAYOUT MAY VARY

14 SWG MILD STEEL
RAL 7032
IP.55
BOTTOM ENTRY
FRONT ACCESS

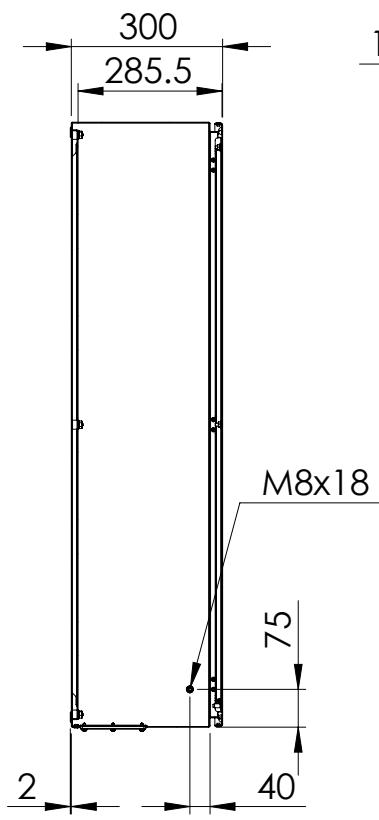
TITLE 500A AUTOMATIC CHANGEOVER SWITCH 4P						Merotech				
CLIENT SPP			THE COPYRIGHT OF THIS DOCUMENT IS THE PROPERTY OF MERTECH SWITCHBOARDS LTD. NO PART OF THE CONTENTS SHALL BE PRODUCED WITHOUT THE EXPRESS WRITTEN PERMISSION OF MERTECH LTD.		SCALE	DRAWN	DATE	CHKD	DATE	39-49,HASTINGS ST. LUTON. TELEPHONE 01582-422622
ORDER										DRG. No.
B	MODIFIED	LB	16.08.13							
A	FOR APPROVAL	CJM	10.11.07	CAD REF.	NOT TO SCALE	CJM	09/07/99	JDR	09/07/99	GD ACOC 500A - C1
ISSUE	MODIFICATION	SIG	DATE							

1 2 3 4 5 6

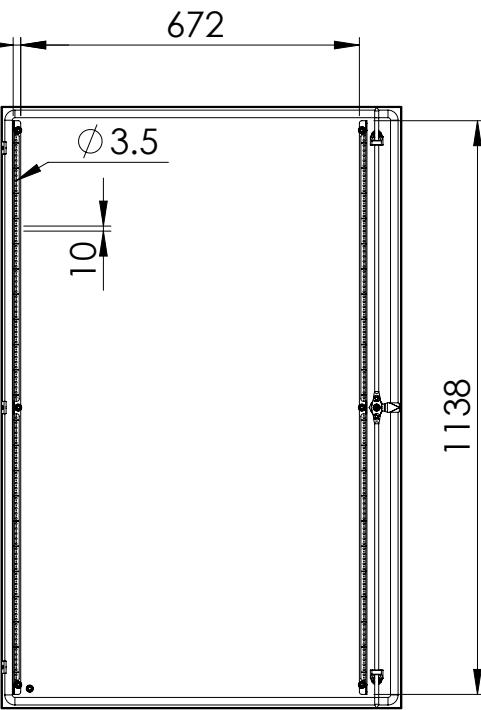
Front view



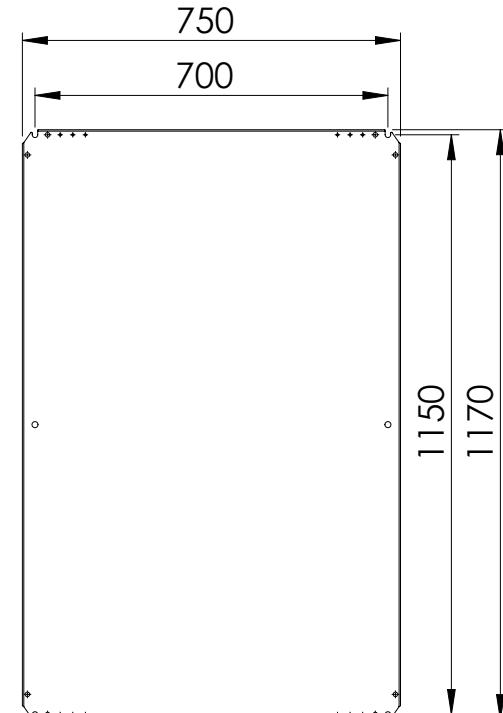
Sectional side view



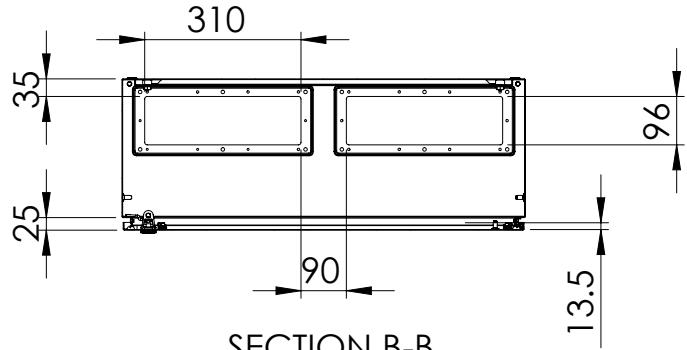
Inside door view



Mounting plate



Sectional top view



Drawn by : bvgrma	Date: 08-03-2013	Finish : RAL 7035	SCALE:1:15	General tolerances according to Norm ISO 2768-1				
Checked by : mderpu	Date: 08-03-2013				E			
Revision : 01								
ELDON		Wall Mounting, Mild steel, Single door enclosure						
1200 mm x 800 mm x 300 mm								
Reference number :						A4		
MAS1208030R5								
MAS1208030PER5								
Page 1/1								



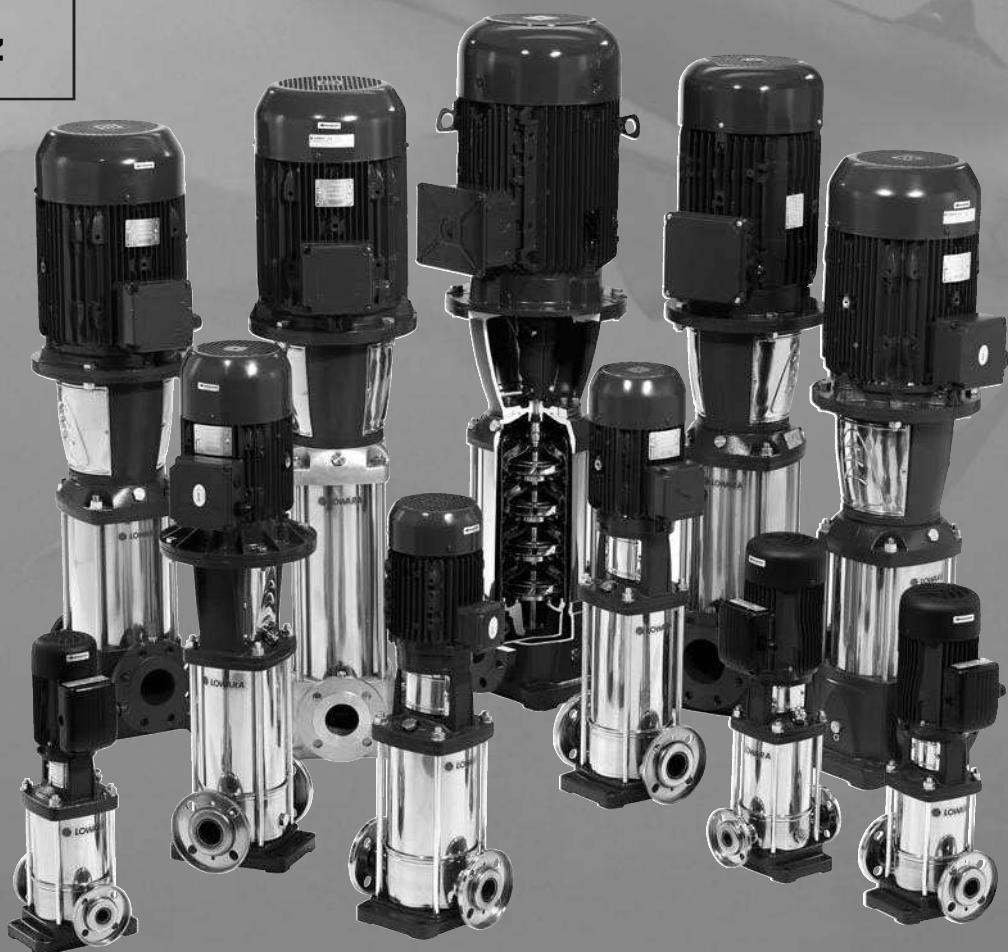
ITT

Lowara

e-SV™ Series 1, 3, 5, 10, 15, 22, 33, 46, 66, 92, 125

Vertical Multistage
Electric Pumps
equipped with
high efficiency motors

50 Hz



Engineered for life



ITT

Vertical Multistage Electric Pumps

e-SV™ series with high efficiency motors



**LIQUID END MADE
ENTIRELY OF
STAINLESS STEEL IN
THE 1, 3, 5, 10, 15,
22 m³/h
STANDARD VERSION**

**STANDARD
MECHANICAL SEAL
CAN BE REPLACED
WITHOUT REMOVING
THE MOTOR FROM
THE PUMP
(FOR 10, 15, 22, 33, 46,
66, 92, 125SV)**

STANDARD MOTOR

**CAN BE USED WITH
THE HYDROVAR®
CONTROL SYSTEM IN
ORDER TO MANAGE
THE OPERATION OF
THE PUMP BASED ON
THE SYSTEM
CONDITIONS AND
SAVE ENERGY**

MARKET SECTORS

CIVIL, AGRICULTURAL, LIGHT INDUSTRY, WATER TREATMENT, HEATING AND AIR CONDITIONING.

APPLICATIONS

- Handling of water, free of suspended solids, in the civil, industrial and agricultural sectors.
- Pressure boosting and water supply systems.
- Irrigation systems.
- Wash systems.
- Water treatment plants.
- Handling of moderately aggressive liquids, demineralised water, water and glycol, etc.
- Circulation of hot and cold water for heating, cooling and conditioning systems.
- Boiler feed.
- Pharmaceutical industries.
- Food & beverage industries.

SPECIFICATIONS

PUMP

The SV pump is a non-self priming vertical multistage pump coupled to a standard motor.

The liquid end, located between the upper cover and the pump casing, is held in place by tie rods. The pump casing is available with different configurations and connection types.

- Delivery: up to **160 m³/h**.
- Head: up to **330 m**.
- Temperature of pumped liquid:
- from -30°C to +120°C for standard version.
- Maximum operating **pressure**:
- 1, 3, 5, 10, 15, 22SV with oval flanges: 16 bar (PN16).
- 1, 3, 5, 10, 15, 22SV with round flanges or Victaulic®, Clamp or DIN 11851 connections: 25 bar (PN 25).
- 33, 46SV: 16, 25, 40 bar (PN 16, PN 25 or PN 40).
- 66, 92, 125SV: 16 or 25 bar (PN 16 or PN 25).
- Tested in compliance with ISO 9906 - Annex A.
- Direction of rotation: clockwise looking at the pump from the top down (marked with an arrow on the adapter and on the coupling).

MOTOR

- Squirrel cage in short circuit, enclosed construction with external ventilation.
- Standard supply Lowara motors up to 22 kW (included) for the 2-pole version. Other motor brands for higher powers.
- **The Lowara SM ≥ 0,75 kW and PLM surface motors have efficiency values that fall within the range normally referred to as efficiency class IE2.**
- IP55 protection.
- Class F insulation.
- Performances according to EN 60034-1.
- Standard voltage:
- Single-phase version: 220-240 V, 50 Hz.
- Three-phase version: 220-240/380-415 V, 50 Hz for power up to 3 kW, 380-415/660-690 V, 50 Hz for power above 3 kW.

i-ALERT™

Patented i-ALERT™ monitor continuously measures vibration to support optimum performance.

Available **as standard** on pumps 7,5 kW (10 HP) and above.

Lowara



CHARACTERISTICS OF 1, 3, 5, 10, 15, 22SV SERIES

- Vertical multistage centrifugal pump. All metal parts in contact with the pumped liquid are made of stainless steel.
- The following versions are available:
 - **F**: round flanges, in-line delivery and suction ports, AISI 304.
 - **T**: oval flanges, in-line delivery and suction ports, AISI 304.
 - **R**: round flanges, delivery port above the suction port, with four adjustable positions, AISI 304.
 - **N**: round flanges, in-line delivery and suction ports, AISI 316.
 - **V, P**: Victaulic® couplings, in-line delivery and suction ports, AISI 316.
 - **C**: Clamp couplings (DIN 32676), in-line delivery and suction ports, AISI 316.
 - **K**: threaded couplings, (DIN 11851), in-line delivery and suction ports, AISI 316.
- Reduced axial thrusts enable the use of **standard motors** that are easily found in the market.
The Lowara SM ≥ 0,75 kW and PLM surface motors have efficiency values that fall within the range normally referred to as efficiency class IE2.
- Mechanical seal according to EN 12756 (ex DIN 24960) and ISO 3069 for 1, 3, 5SV and 10, 15, 22SV (\leq of 4 kW) series.
- **Balanced mechanical seal** according to EN 12756 (ex DIN 24960) and ISO 3069, which **can be replaced without removing the motor from the pump** for 10, 15 and 22SV (\geq of 5,5 kW) series.
- Seal housing chamber designed to prevent the accumulation of air in the critical area next to the mechanical seal.
- A second plug is available for 10, 15, 22SV series.
- Versions with round flanges that can be coupled to counter-flanges, according to EN 1092.
- Threaded, oval counter-flanges made of stainless steel are standard supply for the T versions.
- Round counter-flanges made of stainless steel are available on request for the F, R and N versions.
- Easy maintenance. No special tools required for assembly or disassembly.
- **The pumps for F, T, R, N versions are certified for drinking water use (WRAS and ACS certified).**
- Standard version for temperatures ranging from -30°C to +120°C.

CHARACTERISTICS OF 33, 46, 66, 92, 125SV SERIES

- The following versions are available:
 - **G**: vertical multistage centrifugal pump with impellers, diffusers and outer sleeve made entirely of stainless steel, and with pump casing and motor adaptor made of cast iron.
 - **N, P**: version made entirely of AISI 316 stainless steel.
- Innovative axial load compensation system on pumps with higher head. This ensures reduced axial thrusts and enables the use of **standard motors** that are easily found in the market. **The Lowara surface motors have efficiency values that fall within the range normally referred to as efficiency class IE2.**
- **Balanced mechanical seal** according to EN 12756 (ex DIN 24960) and ISO 3069, which **can be replaced without removing the motor from the pump**.
- Seal housing chamber designed to prevent the accumulation of air in the critical area next to the mechanical seal.
- **The pumps for G, N versions are certified for drinking water use (WRAS and ACS certified).**
- Standard version for temperatures ranging from -30°C to +120°C.
- Pump body fitted with couplings for installing pressure gauges on both suction and delivery flanges.
- In-line ports with round flanges that can be coupled to counter-flanges, in compliance with EN 1092.
- Mechanical sturdiness and easy maintenance. No special tools required for assembly or disassembly.

Inlet pressure of the pump plus static pressure of the water within the pump cannot exceed the nominal pressure (PN). Using different motors from those provided by Lowara could limit inlet pressure.
In this event please contact customer services.

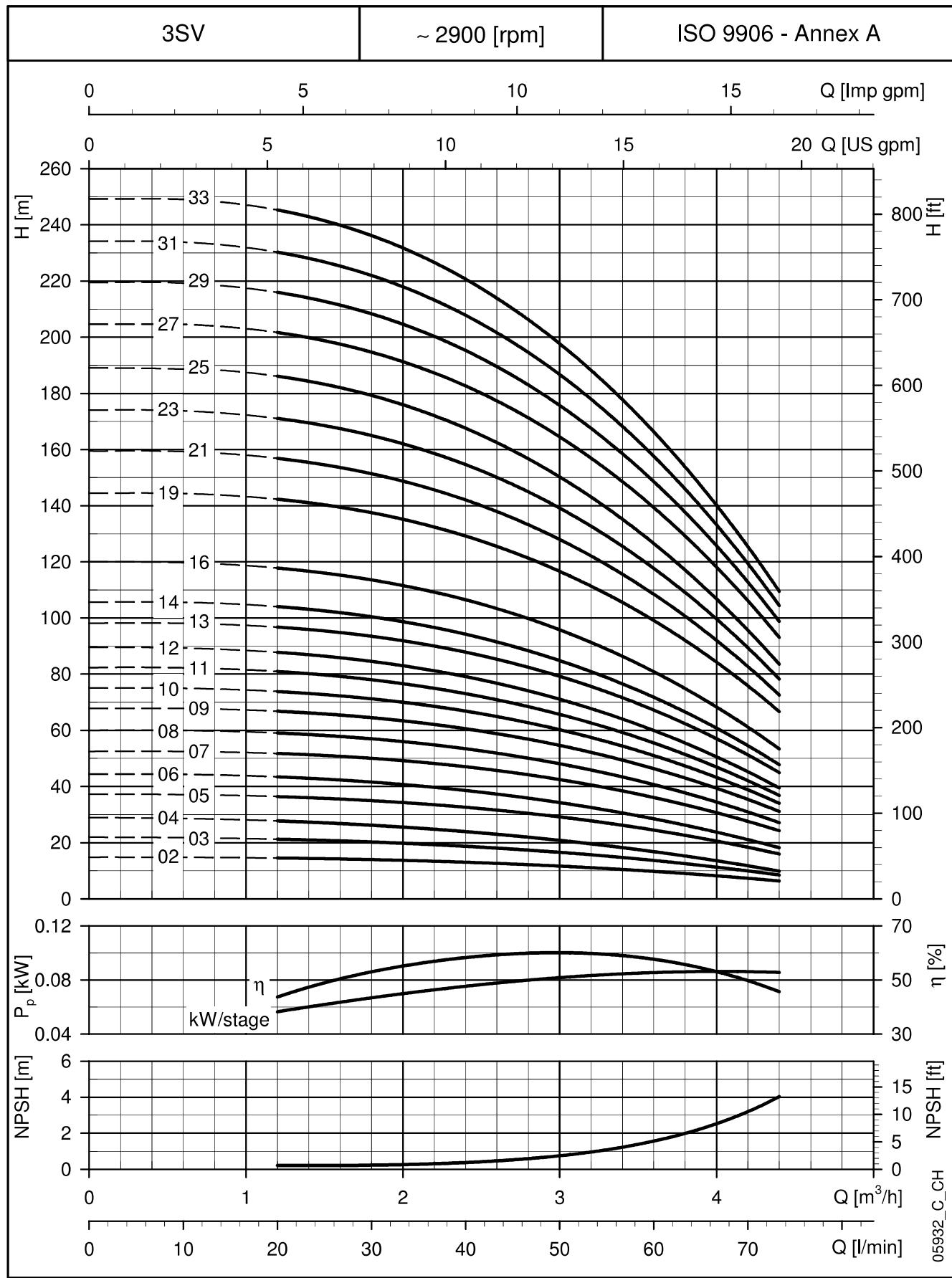
AVAILABLE ON REQUEST

Special versions are available to suit many applications. For details see page 54.



ITT

Lowara

**3SV SERIES
OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**These performances are valid for liquids with density $\rho = 1.0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

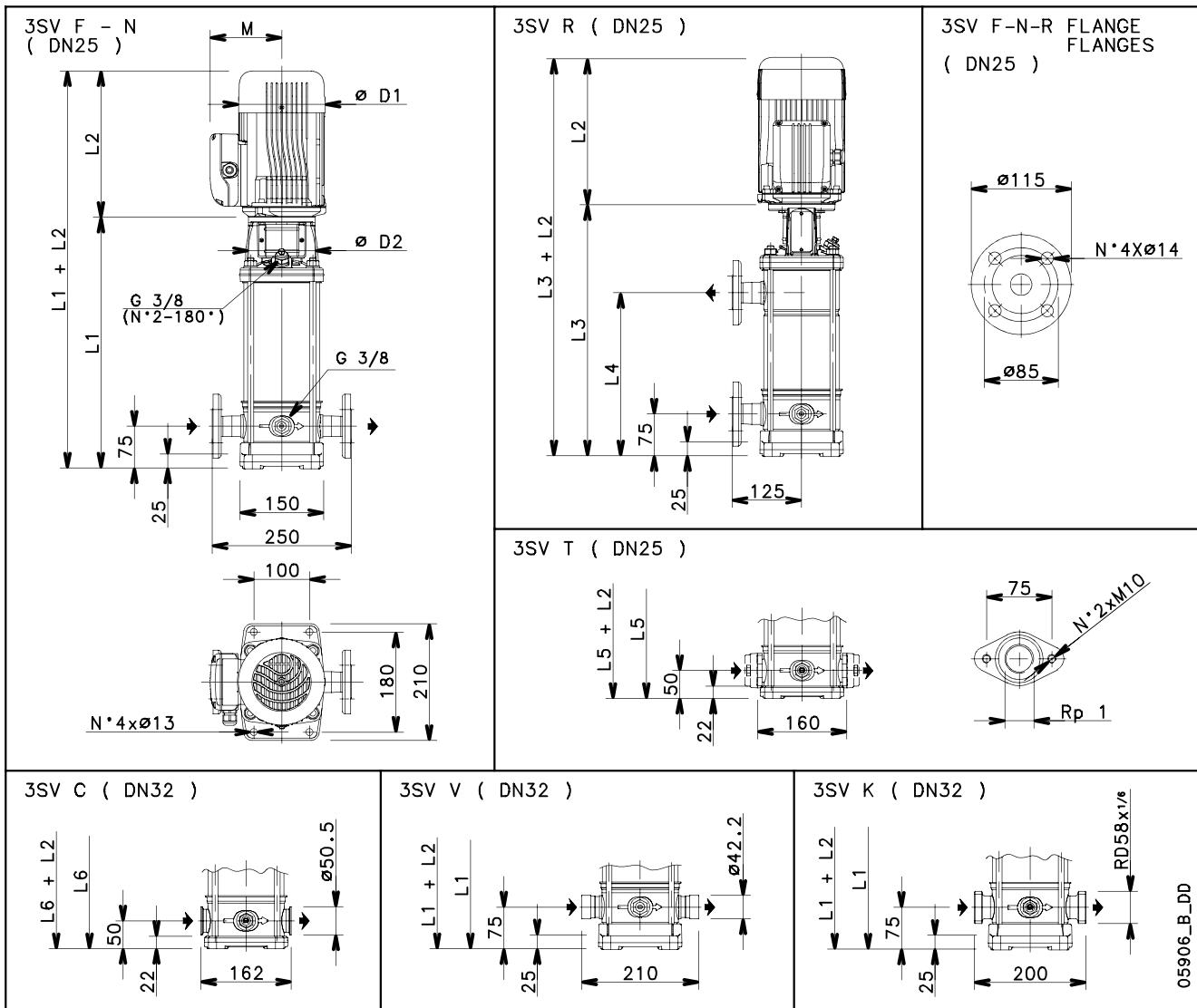


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Lowara

3SV SERIES

DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES



PUMP TYPE	MOTOR		DIMENSIONS (mm)												WEIGHT kg	
	kW	SIZE	L1	L2		L3	L4	L5	L6	M	D1		D2	PUMP	ELECTRIC PUMP	
3SV02	0,37	71	278	209	209	-	-	253	253	111	111	120	120	105	8	12,8
3SV03	0,37	71	278	209	209	-	-	253	253	111	111	120	120	105	8,4	13,2
3SV04	0,37	71	298	209	209	-	-	273	273	111	111	120	120	105	8,8	13,6
3SV05	0,55	71	318	231	231	-	-	293	293	121	121	140	140	105	9,2	14
3SV06	0,55	71	338	231	231	-	-	313	313	121	121	140	140	105	9,7	16,4
3SV07	0,75	80	368	226	263	368	207	343	343	121	129	140	155	120	10,9	16,8
3SV08	0,75	80	388	226	263	388	227	363	363	121	129	140	155	120	11,3	21,9
3SV09	1,1	80	408	263	263	408	247	383	383	137	129	155	155	120	11,7	24,4
3SV10	1,1	80	428	263	263	428	267	403	403	137	129	155	155	120	12,1	24,8
3SV11	1,1	80	448	263	263	448	287	423	423	137	129	155	155	120	12,5	25,2
3SV12	1,1	80	468	263	263	468	307	443	443	137	129	155	155	120	13,3	25,6
3SV13	1,5	90	498	263	298	498	327	473	473	137	134	155	174	140	14	30,6
3SV14	1,5	90	518	263	298	518	347	493	493	137	134	155	174	140	14,4	31
3SV16	1,5	90	558	263	298	558	387	533	533	137	134	155	174	140	15,2	31,8
3SV19	2,2	90	618	298	298	618	447	593	593	151	134	174	174	140	16,4	34,4
3SV21	2,2	90	658	298	298	658	487	633	633	151	134	174	174	140	17,2	35,2
3SV23	2,2	90	698	298	298	698	527	-	673	151	134	174	174	140	18	36
3SV25	2,2	90	738	298	298	738	567	-	713	151	134	174	174	140	18,9	36,8
3SV27	3	100	788	-	298	788	607	-	763	-	134	-	174	160	20,7	42,6
3SV29	3	100	828	-	298	828	647	-	803	-	134	-	174	160	21,5	43,4
3SV31	3	100	868	-	298	868	687	-	843	-	134	-	174	160	22,3	44,2
3SV33	3	100	908	-	298	908	727	-	883	-	134	-	174	160	23,1	45



ITT

Lowara

e-SV™ SERIES MOTORS

- Standard Lowara motors with powers up to 22 kW (included) for the 2-pole version. Other motor brands are used for higher powers.
- The Lowara PLM and SM three-phase motors have efficiency values that fall within the range normally referred to as **efficiency class IE2**.
- Short-circuit squirrel-cage motor (TEFC), enclosed construction with external ventilation.
- IP55 protection.
- Class F insulation.
- Performance according to EN 60034-1.
- Standard voltage.
- Cable gland with standard passage dimensions according to EN 50262 (metric thread).

• **Single-phase** version: 220-240 V 50 Hz with built-in automatic reset overload protection up to 1,5 kW.

For higher powers the protection must be provided by the user.

• **Three-phase** version 220-240/380-415 V 50 Hz for power up to 3 kW. 380-415/660-690 V 50 Hz for power above 3 kW. Overload protection to be provided by the user.

• Type of motor used:

2-Pole

Single-phase: Lowara SM (0,37-1,5 kW)

Lowara PLM (2,2 kW)

Three-phase: Lowara SM (0,37-0,55 kW)

Lowara SM HE (0,75-1,1 kW)

Lowara PLM (1,5-22 kW)

Other brands (30-55 kW)

SINGLE-PHASE MOTORS AT 50 Hz, 2-POLE

MOTOR TYPE			IEC SIZE*	CONSTRUCTION DESIGN	ABSORBED CURRENT In (A) 220-240 V	CAPACITOR		DATA FOR 230 V 50 Hz VOLTAGE					
kW						μF	V	min⁻¹	Is / In	η %	cosφ	Tn Nm	Ts/Tn**
0,37	71R	B14	2,79-2,85		14	450	2745	2,64	65,1	0,96	1,39	0,68	
0,55	71	B14	3,76-3,99		16	450	2820	3,72	68,9	0,91	1,86	0,61	
0,75	80R	B14	4,90-4,85		20	450	2765	3,42	70,1	0,96	2,59	0,58	
1,1	80	B14	6,88-6,65		30	450	2800	3,89	74,7	0,96	3,75	0,46	
1,5	90R	B14	9,21-8,58		40	450	2810	4,00	76,1	0,98	5,09	0,39	
2,2	90	B14	12,5-11,6		70	450	2825	4,47	82,4	0,97	7,43	0,53	

* R = Reduced size of motor casing as compared to shaft extension and flange.

1-224sv-motm-2p50-en_a_te

** Ts/Tn = ratio between starting torque and nominal torque.

THREE-PHASE MOTORS AT 50 Hz, 2-POLE

MOTOR TYPE			ABSORBED CURRENT in (A)				DATA FOR 400 V 50 Hz VOLTAGE					
kW	IEC SIZE*	CONSTRUCTION DESIGN	THREE-PHASE				min⁻¹	Is / In	η %	cosφ	Tn Nm	Ts/Tn**
			Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690V						
0,37	71R	B14	2,34	1,35	-	-	2770	4,32	65,3	0,66	1,38	4,14
0,55	71	B14	2,56	1,48	-	-	2845	5,97	72,3	0,74	1,85	3,74
0,75	80	B14	3,05	1,76	-	-	2895	8,70	77,8	0,79	2,47	4,71
1,1	80	B14	4,09	2,36	-	-	2895	8,98	82,5	0,82	3,63	4,62
1,5	90	B14	5,23	3,02	-	-	2885	7,86	83,8	0,86	4,96	3,34
2,2	90	B14	8,04	4,64	-	-	2895	8,63	85,7	0,80	7,25	3,74
3	100R	B14	10,7	6,19	-	-	2885	8,32	85,6	0,82	9,92	3,52
4	112R	B14	-	-	7,63	4,41	2905	9,52	89,1	0,85	13,1	3,04
5,5	132R	B5	-	-	10,4	6,00	2900	10,3	87,5	0,87	18,1	4,43
7,5	132	B5	-	-	14,0	8,08	2925	9,21	88,5	0,87	24,5	3,26
11	160R	B5	-	-	20,5	11,8	2925	9,60	89,6	0,86	35,9	3,47
15	160	B5	-	-	26,0	15,0	2945	8,45	91,7	0,91	48,6	2,26
18,5	160	B5	-	-	33,2	19,2	2950	9,75	92,0	0,88	59,8	2,82
22	180R	B5	-	-	38,6	22,3	2955	9,50	92,1	0,89	71,1	2,74
30	200	B5	-	-	53,6	31,1	2955	6,50	92,9	0,87	97,0	2,40
37	200	B5	-	-	65,8	38,1	2950	6,80	93,3	0,87	120	2,40
45	225	B5	-	-	78,0	45,2	2960	7,00	93,6	0,89	145	2,20
55	250	B5	-	-	95,0	55,1	2960	7,00	93,9	0,89	178	2,20

* R = Reduced size of motor casing as compared to shaft extension and flange.

1-125sv-mott-2p50-en_a_te

** Ts/Tn = ratio between starting torque and nominal torque.



ITT

Lowara

e-SV™ SERIES MOTORS

- Standard Lowara motors with powers up to 22 kW (included) for the 2-pole version. Other motor brands are used for higher powers.
- The Lowara PLM and SM three-phase motors have efficiency values that fall within the range normally referred to as **efficiency class IE2**.
- Short-circuit squirrel-cage motor (TEFC), enclosed construction with external ventilation.
- IP55 protection.
- Class F insulation.
- Performance according to EN 60034-1.
- Standard voltage.
- Cable gland with standard passage dimensions according to EN 50262 (metric thread).

• **Single-phase** version: 220-240 V 50 Hz with built-in automatic reset overload protection up to 1,5 kW.

For higher powers the protection must be provided by the user.

• **Three-phase** version 220-240/380-415 V 50 Hz for power up to 3 kW. 380-415/660-690 V 50 Hz for power above 3 kW. Overload protection to be provided by the user.

• Type of motor used:

2-Pole

Single-phase: Lowara SM (0,37-1,5 kW)

Lowara PLM (2,2 kW)

Three-phase: Lowara SM (0,37-0,55 kW)

Lowara SM HE (0,75-1,1 kW)

Lowara PLM (1,5-22 kW)

Other brands (30-55 kW)

SINGLE-PHASE MOTORS AT 50 Hz, 2-POLE

MOTOR TYPE			IEC SIZE*	CONSTRUCTION DESIGN	ABSORBED CURRENT In (A) 220-240 V	CAPACITOR		DATA FOR 230 V 50 Hz VOLTAGE					
kW						μF	V	min⁻¹	Is / In	η %	cosφ	Tn Nm	Ts/Tn**
0,37	71R	B14	2,79-2,85		14	450	2745	2,64	65,1	0,96	1,39	0,68	
0,55	71	B14	3,76-3,99		16	450	2820	3,72	68,9	0,91	1,86	0,61	
0,75	80R	B14	4,90-4,85		20	450	2765	3,42	70,1	0,96	2,59	0,58	
1,1	80	B14	6,88-6,65		30	450	2800	3,89	74,7	0,96	3,75	0,46	
1,5	90R	B14	9,21-8,58		40	450	2810	4,00	76,1	0,98	5,09	0,39	
2,2	90	B14	12,5-11,6		70	450	2825	4,47	82,4	0,97	7,43	0,53	

* R = Reduced size of motor casing as compared to shaft extension and flange.

1-224sv-motm-2p50-en_a_te

** Ts/Tn = ratio between starting torque and nominal torque.

THREE-PHASE MOTORS AT 50 Hz, 2-POLE

MOTOR TYPE			ABSORBED CURRENT in (A)				DATA FOR 400 V 50 Hz VOLTAGE					
kW	IEC SIZE*	CONSTRUCTION DESIGN	THREE-PHASE				min⁻¹	Is / In	η %	cosφ	Tn Nm	Ts/Tn**
			Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690V						
0,37	71R	B14	2,34	1,35	-	-	2770	4,32	65,3	0,66	1,38	4,14
0,55	71	B14	2,56	1,48	-	-	2845	5,97	72,3	0,74	1,85	3,74
0,75	80	B14	3,05	1,76	-	-	2895	8,70	77,8	0,79	2,47	4,71
1,1	80	B14	4,09	2,36	-	-	2895	8,98	82,5	0,82	3,63	4,62
1,5	90	B14	5,23	3,02	-	-	2885	7,86	83,8	0,86	4,96	3,34
2,2	90	B14	8,04	4,64	-	-	2895	8,63	85,7	0,80	7,25	3,74
3	100R	B14	10,7	6,19	-	-	2885	8,32	85,6	0,82	9,92	3,52
4	112R	B14	-	-	7,63	4,41	2905	9,52	89,1	0,85	13,1	3,04
5,5	132R	B5	-	-	10,4	6,00	2900	10,3	87,5	0,87	18,1	4,43
7,5	132	B5	-	-	14,0	8,08	2925	9,21	88,5	0,87	24,5	3,26
11	160R	B5	-	-	20,5	11,8	2925	9,60	89,6	0,86	35,9	3,47
15	160	B5	-	-	26,0	15,0	2945	8,45	91,7	0,91	48,6	2,26
18,5	160	B5	-	-	33,2	19,2	2950	9,75	92,0	0,88	59,8	2,82
22	180R	B5	-	-	38,6	22,3	2955	9,50	92,1	0,89	71,1	2,74
30	200	B5	-	-	53,6	31,1	2955	6,50	92,9	0,87	97,0	2,40
37	200	B5	-	-	65,8	38,1	2950	6,80	93,3	0,87	120	2,40
45	225	B5	-	-	78,0	45,2	2960	7,00	93,6	0,89	145	2,20
55	250	B5	-	-	95,0	55,1	2960	7,00	93,9	0,89	178	2,20

* R = Reduced size of motor casing as compared to shaft extension and flange.

1-125sv-mott-2p50-en_a_te

** Ts/Tn = ratio between starting torque and nominal torque.

HIGH PRESSURE (50/60 Hz)

e-SV™ SERIES - HIGH PRESSURE 50/60 Hz

Background and context

In the water treatment industry (Ultra or Nano filtration, reverse osmosis) in the washing and cleaning industry (High pressure washdown systems) or with boiler-feed application, high pressure is mandatory to ensure consistency in the performance of the systems. Therefore Lowara has developed e-SV™ High Pressure: a wide range of pumps and pump systems able to deliver robust and durable performances up to 45 bar.

Benefits of e-SV™ HIGH PRESSURE

Versatile range: e-SV™ High pressure is available in two different configurations: single pump solution or tandem pump solution (two pumps in series). If the inlet pressure value is already high, Lowara delivers a single pump able to withstand the high inlet pressure and deliver up to 45 bar pressure at the outlet. With applications where the high pressure has to be delivered starting from atmospheric pressure in the inlet, Lowara delivers the tandem solution able to deliver up to 45 bar pressure at the outlet of the system.

Long lasting performances: e-SV™ High Pressure benefits of a particular design of the sleeve to withstand the pressure without any limitation in the inlet pressure but maximum 45 bar measured at the outlet. The specific balanced mechanical seal and the balanced design of the impeller and the hard material intermediate bush bearing allows e-SV™ withstanding up to 45 bar without stressing the motor and the pump components, with a direct consequence on the reduction of the life cycle cost.

Easy installation and maintenance: e-SV™ High Pressure in tandem system is composed of two identical standard e-SV™ High Pressure pumps making replacement easy and cost-effective. e-SV™ High Pressure in tandem has to be ordered as two single e-SV™ High Pressure pumps together with the specific accessories for the installation (see specific accessories section).

Code identification

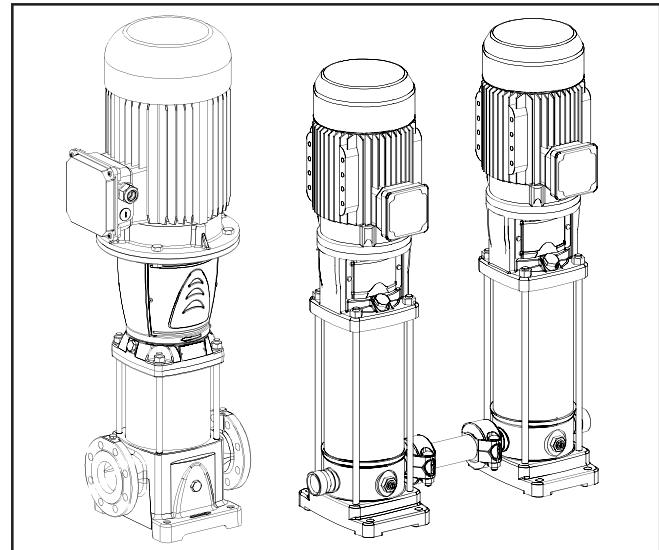
e-SV™ High Pressure design is identified with a "P" in the product codification of the whole e-SV™ range.

Example: 3SV13P015T

P = High Pressure version.

Special features / product benefits

-**Double sleeve design** to withstand high pressure up to 45 bar.



-**Balanced standard mechanical seal (EN12756)** on all models. **Easy to replace, without removing the motor** from 5,5 kW.

-**Hard material intermediate bush bearing** (Tungsten Carbide) to withstand heavy duty applications.

-**Balanced impeller design** to reduce axial thrust for longer standard motor bearing life.

-Wide range of size to cover all requested duty points: from 1SV to 125SV.

-**IE2 standard motors**, 3-phase, 2-poles from 0,75 kW to 55 kW with blocked bearing **to support maximum thrust without limiting inlet pressure**.

-**Hydrovar® drive available on all models to allow e-SV™ High Pressure into an intelligent, variable speed system.** Ideal for single pumping solution or multiple pumping set solution (up to 8 pumps).

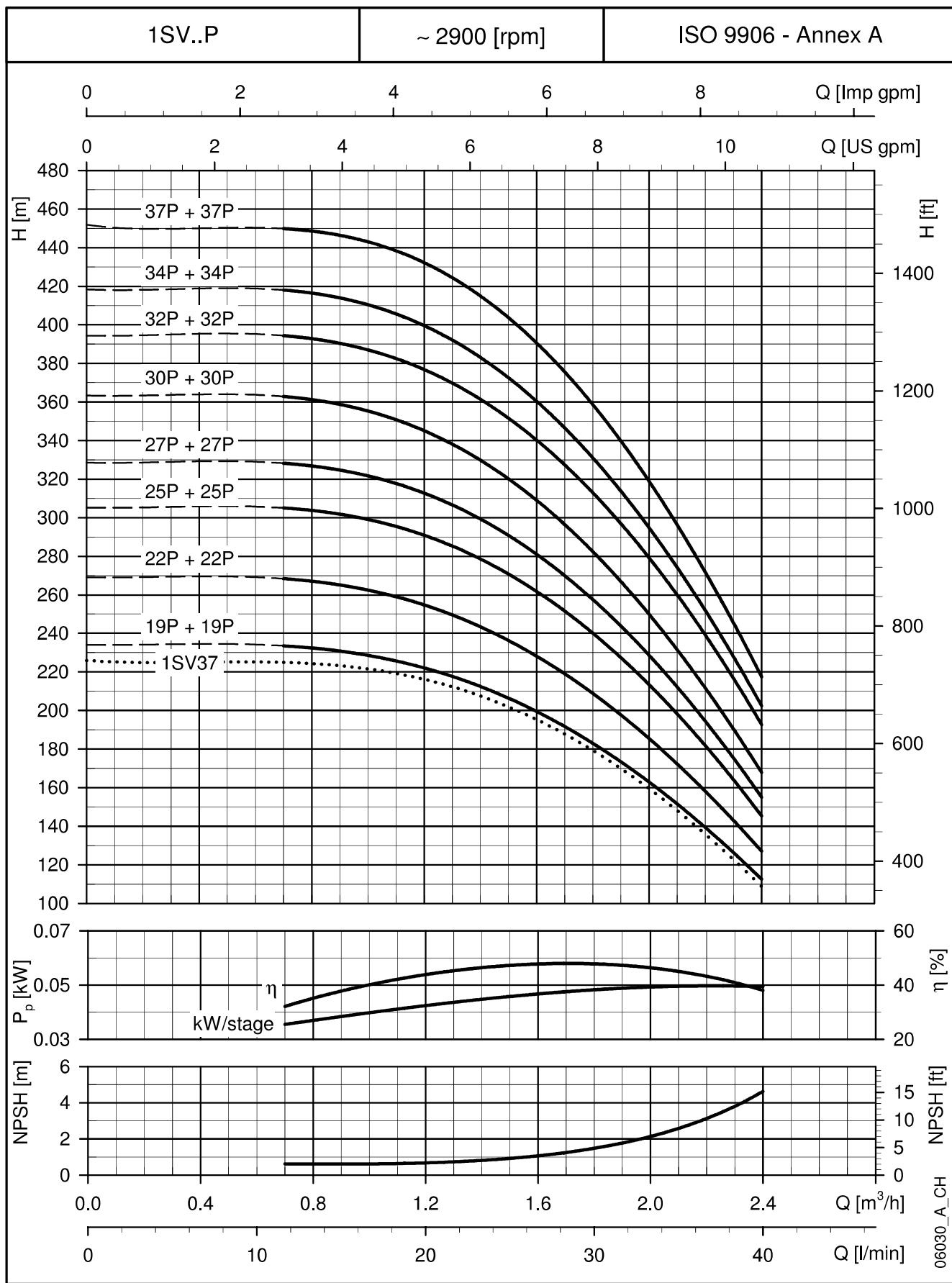
-**i-Alert device** to reduce life cycle costs by increasing Mean time between Failures (MTBF).

Special configurations

e-SV™ High Pressure offers a wide range of configurations:

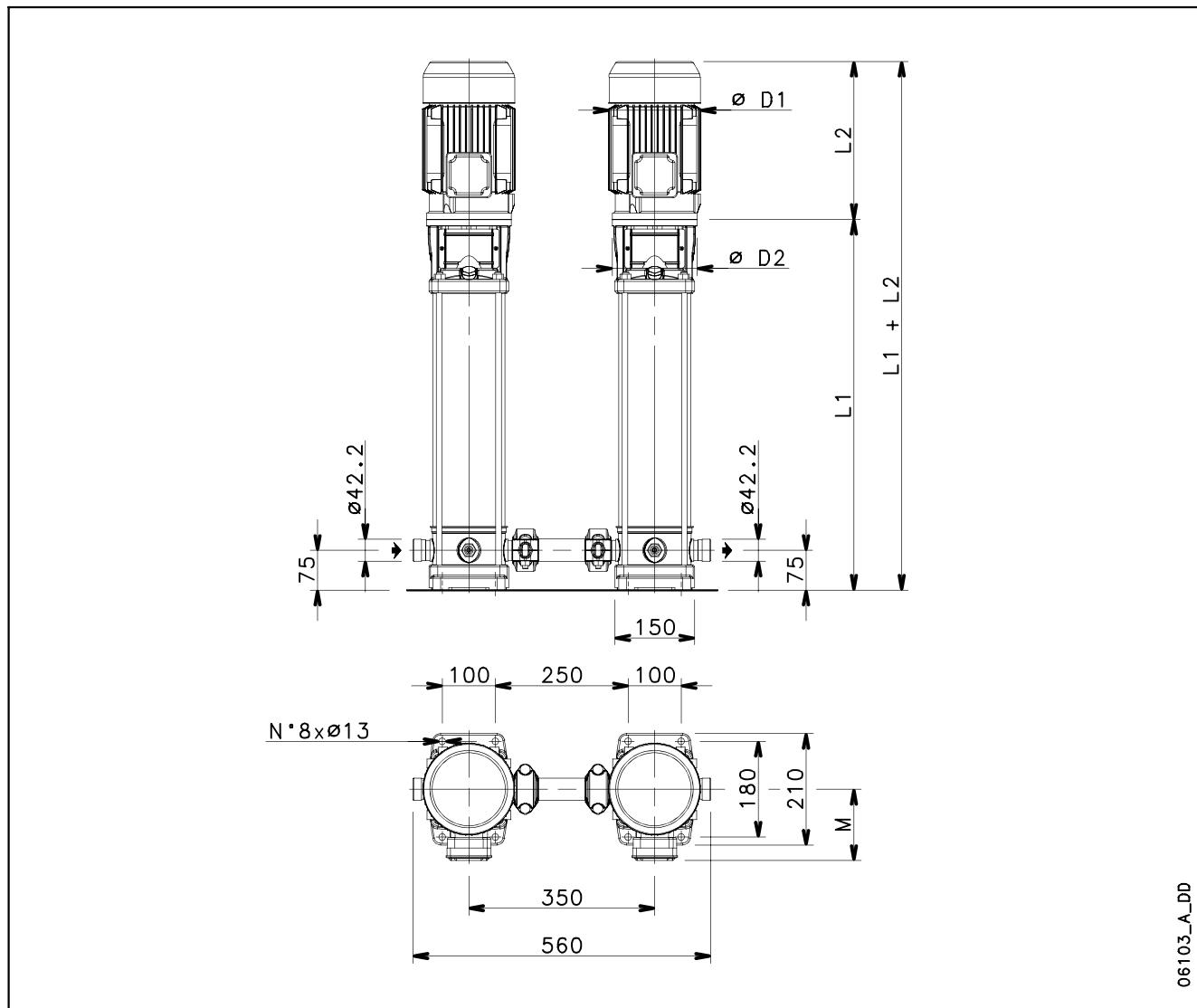
- Material execution. See Material section.
- Mechanical seal and rubbers options. See Mechanical seal and rubber section.
- Motors options and configuration. See Motor section.
- Hydrovar® drive fitted. See e-SVH – Hydrovar® fitted section.

**1SV..P SERIES - HIGH PRESSURE
OPERATING CHARACTERISTICS AT 50 Hz, 2-POLE**



These performances are valid for liquids with density $\rho = 1.0$ Kg/dm³ and kinematic viscosity $\nu = 1$ mm²/sec.

**1SV..P SERIES - HIGH PRESSURE
DIMENSIONS AND WEIGHTS AT 50 Hz, 2-POLE**



PUMP TYPE	MOTOR		DIMENSIONS (mm)					WEIGHT (Kg)	
	kW	Size	L1	L2	M	D1	D2	PUMP	ELECTRIC
1SV19P	1,1	80	628	263	129	155	120	17,5	30,5
1SV22P	1,1	80	688	263	129	155	120	19	32
1SV25P	1,5	90	758	268	137	178	140	21,2	35,2
1SV27P	1,5	90	798	268	137	178	140	22,2	36,2
1SV30P	1,5	90	858	268	137	178	140	23,6	37,6
1SV32P	2,2	90	898	268	137	178	140	24,6	40,8
1SV34P	2,2	90	938	268	137	178	140	25,6	41,8
1SV37P	2,2	90	998	268	137	178	140	27	43,2

Dimensions and weights are related to one electric pump.

1sv-p-2p50-en_b_td

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2

IF IN DOUBT ASK - DO NOT SCALE

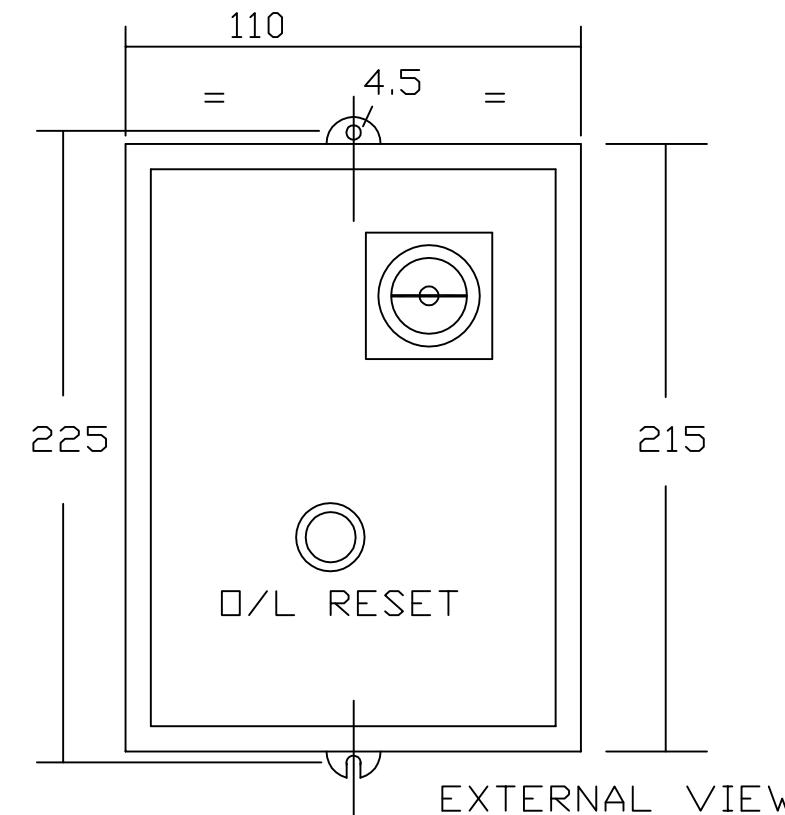
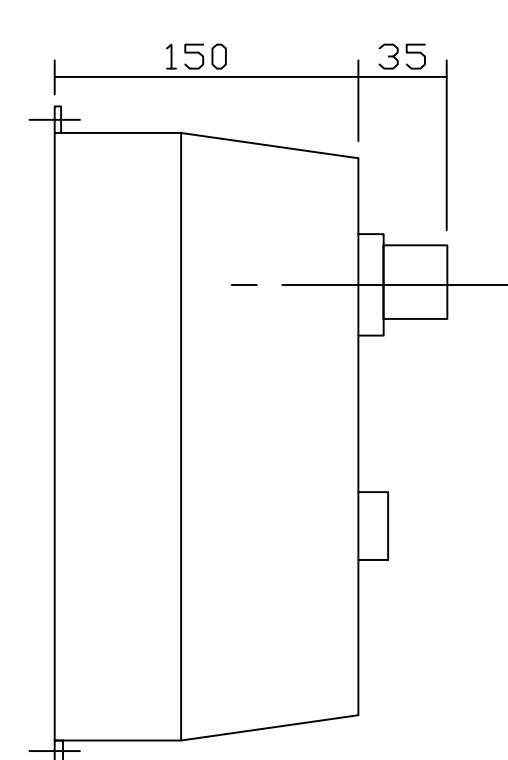
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UNTOLERANCED DIMENSIONS MUST COMPLY WITH SPP PUMPS LTD STD EDT PRA L02

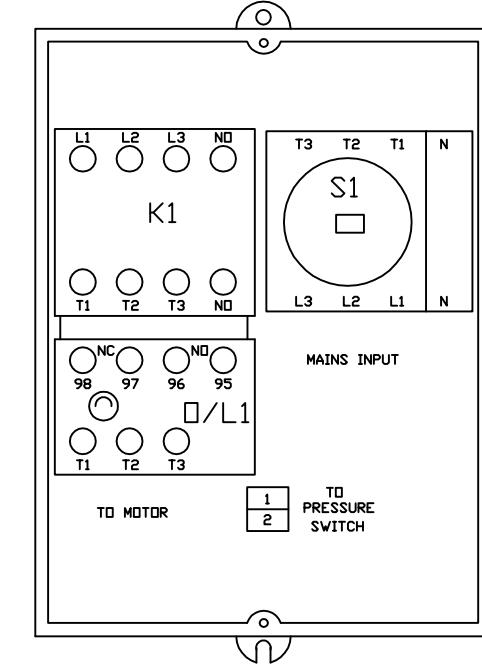
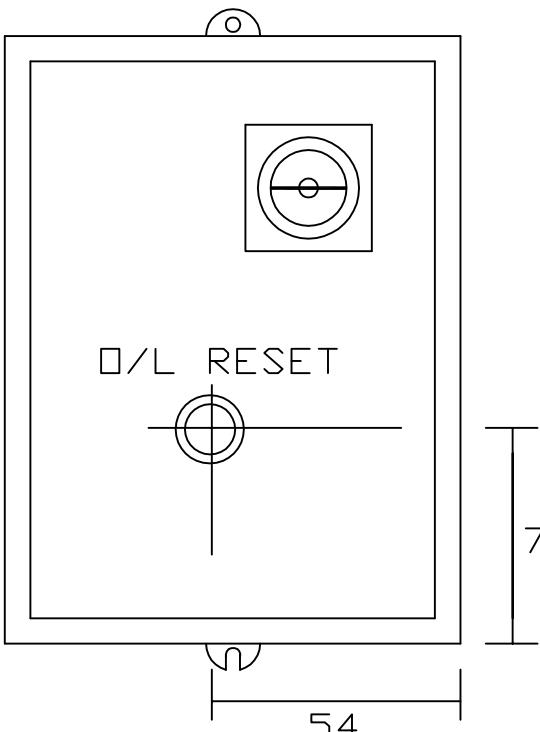
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THIRD ANGLE PROJECTION

DN27621

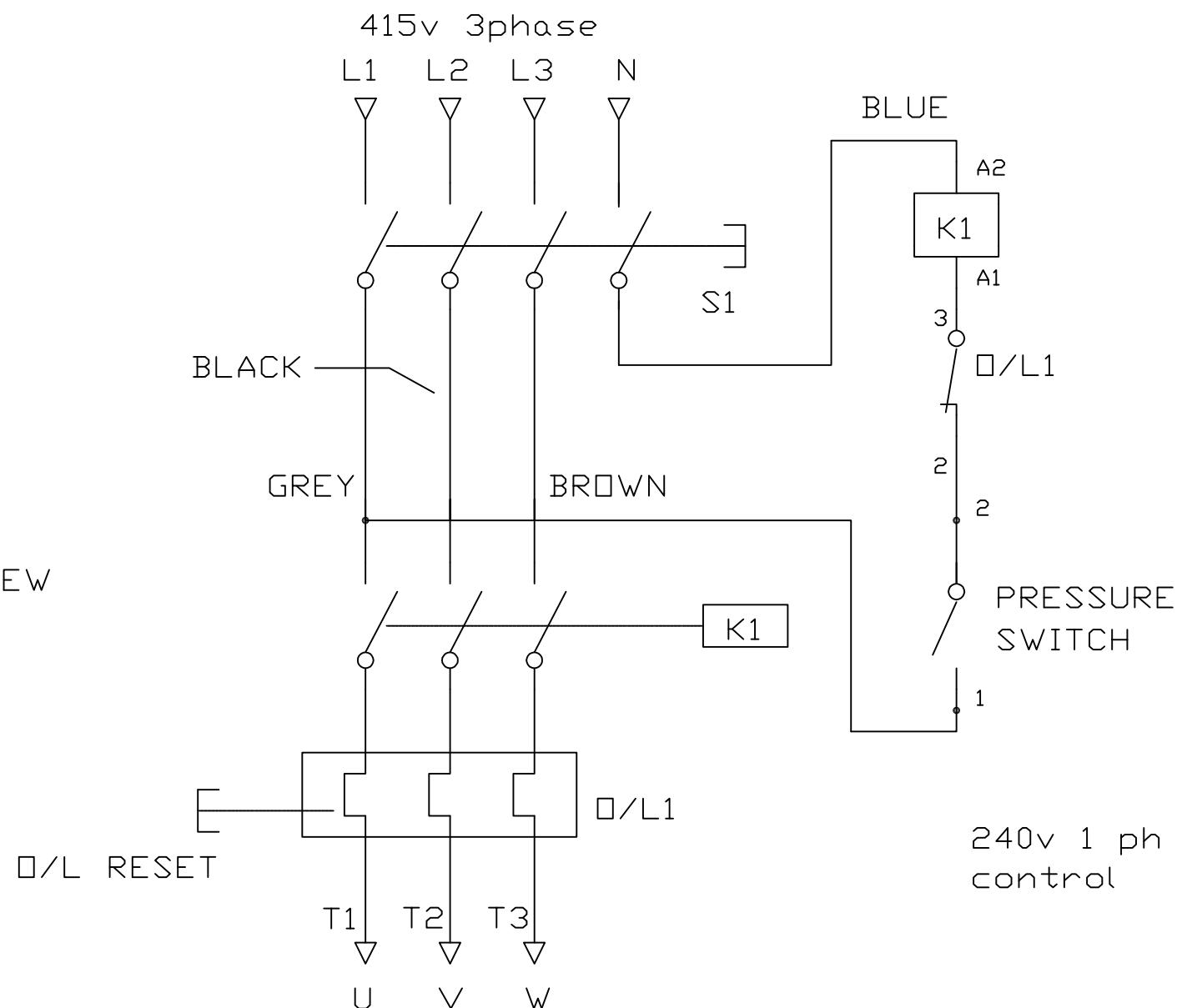


EXTERNAL VIEW



INTERNAL VIEW

CONNECTION DIAGRAM



NOTES :

PLASTIC ENCLOSURE, GREY LID AND BLACK BASE
SUITABLE FOR DIRECT WALL MOUNTING
INGRESS PROTECTION IP65



DRN	DC	02.11.07
CHK	WR	22.11.07
APP'D		

PUMPS

Drawn scale: NTS
Original W/O No.NA

SPP PUMPS LTD.
THEALE CROSS, READING, BERKSHIRE, ENGLAND
RG31 7SP TEL +44 (0) 1189 323123

COMPLETE UNIT
JOCKEY PUMP
CONTROLLER 5.5KW

DESCRIPTION
GENERAL LAYOUT

FileName DN27621.Dwg Border Size A3

DRAWING NUMBER DN27621

2	R37768	Pump Starter: Metron Eledyne	D.G 15.04.08
1	R37470	First Issue: Jockey Starter: Metron Eledyne 5.5Kw	D.G 25.01.08
REV	Register No. Revision Details		SIG & DATE

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2
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6

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GENERAL ARRANGEMENT

CONNECTION DIAGRAM 400V

