

QM, QT

Control panels



LENNTECH
WATER TREATMENT Solutions



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Index



TYPE	Supply		No. pumps				Application		
	1 ~	3 ~	  	 	 				
QM	✓		✓				✓	✓	
M COMP	✓		✓				✓	✓	
PFC-M	✓		✓				✓		
QML/A 1 D	✓		✓					✓	✓
T COMP		✓	✓				✓		
PFC-T		✓	✓				✓		
QTL/A 1 D		✓	✓				✓	✓	✓
QTL 1 D FTE		✓	✓				✓		✓
QTL/A 1 ST FT		✓	✓				✓		✓
QTL/A 1 ST FT-RH		✓	✓					✓	
QTL 1 ST FTE		✓	✓				✓		✓
QTL 1 SS E		✓	✓				✓		✓
QTL 1 IS FTE		✓	✓				✓		
QML/A 2 D	✓			✓				✓	✓
QTL/A 2 D		✓		✓					✓
QTL/A 2 ST FT		✓		✓					✓
QTL/A 2 ST FT-RH		✓		✓				✓	
QML/A 3 D	✓				✓				✓
QTL/A 3 D		✓			✓			✓	✓
QTL/A 3 ST FT		✓			✓				✓
QTL/A 3 ST FT-RH		✓			✓			✓	
QML 1 VFT	✓		✓				✓		✓
QTL 1 VFT		✓	✓				✓		✓
QML 2 VFT	✓			✓					✓
QTL 2 VFT		✓		✓					✓
QML 1.1 VFT	✓			✓					✓
QTL 1.1 VFT				✓					✓
QML 3 VFT	✓				✓				✓
QTL 3 VFT		✓			✓				✓
QTL 1.2 VFT		✓			✓				✓
QTL 4 VFT		✓				✓			✓
QTL 1.3 VFT		✓				✓			✓

Power kW	Rotation speed		Starting				Typology		page
	Fixed Speed	Variable speed	D.O.L.	Y/Δ	Soft start	Impedance stator	Electromechanical	Electronic	
0,3 ÷ 1,5	✓		✓				✓		588
0,37 ÷ 2,2	✓		✓				✓		589
0,37 ÷ 2,2	✓		✓					✓	589
0,25 ÷ 1,5	✓		✓					✓	590
0,37 ÷ 7,5	✓		✓				✓		590
0,37 ÷ 5,5	✓		✓					✓	591
0,25 ÷ 11	✓		✓					✓	591
4 ÷ 30	✓		✓				✓		592
5,5 ÷ 45	✓			✓				✓	592
4 ÷ 92	✓			✓				✓	593
5,5 ÷ 110	✓			✓			✓		594
7,5 ÷ 132	✓				✓			✓	594
5,5 ÷ 110	✓					✓	✓		595
0,25 ÷ 1,5	✓		✓					✓	596
0,37 ÷ 5,5	✓		✓					✓	596
5,5 ÷ 45	✓			✓				✓	597
4 ÷ 92	✓			✓				✓	597
0,25 ÷ 1,5	✓		✓					✓	598
0,37 ÷ 5,5	✓		✓					✓	598
5,5 ÷ 45	✓			✓				✓	599
4 ÷ 92	✓			✓				✓	599
0,37 ÷ 3,7		✓	✓					✓	600
0,37 ÷ 75		✓	✓					✓	600
0,37 ÷ 3,7		✓						✓	601
0,37 ÷ 75		✓						✓	601
0,37 ÷ 3,7		✓						✓	602
0,37 ÷ 75		✓						✓	602
0,37 ÷ 3,7		✓						✓	603
0,37 ÷ 75		✓						✓	603
0,37 ÷ 75		✓						✓	604
0,37 ÷ 75		✓						✓	604
0,37 ÷ 75		✓						✓	605

Control panels



QM Control panel for 1 pump with single-phase motor, direct starting



Code	Type	Capacitor	Motor 230V - 1~	Dimensions <i>HxBxP mm</i>
		450Vc	kW	
44017940000	QM 6,3	6,3 μ F	0,3	200x75x76
44017950000	QM 20	20 μ F	0,55 - 0,75	200x75x76
44017960000	QM 25	25 μ F	0,9 - 1,1	200x75x76
44017990000	QM 30	30 μ F	0,9 - 1,1	200x75x76

Construction

Control panel with ON-OFF switch and capacitor, for 1 pump with single-phase motor without built-in capacitor.

Technical data

- Mains single-phase 230V $\pm$ 10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Thermoplastic case.
- ON-OFF switch with lamp
- Capacitor
- Terminal board
- Cable glands

QM Control panel for 1 pump with single-phase motor, direct starting



Code	Type	Protector	Capacitor	Motor 230V - 1~	Dimensions <i>HxBxP mm</i>
		max A	450Vc	kW	
44017950004	QM 4-16	4	16 μ F	0,37	200x75x76
44017950007	QM 5-20	5	20 μ F	0,55	200x75x76
44017960004	QM 5-25	5	25 μ F	0,55	200x75x76
	QM 6-20	6	20 μ F	0,75	200x75x76
44017960009	QM 7-25	7	25 μ F	0,9	200x75x76
44017990001	QM 7-30	7	30 μ F	0,75	200x75x76
44017960007	QM 8-25	8	25 μ F	1,1	200x75x76
44017990004	QM 8-30	8	30 μ F	1,1	200x75x76
44018000001	QM 10-40	10	40 μ F	1,1	200x75x76
44018000000	QM 12-35	12	35 μ F	1,5	200x75x76

Construction

Control panel with ON-OFF switch, circuit breaker and capacitor, for 1 submersible pump with single-phase motor without built-in capacitor.

Technical data

- Mains single-phase 230V $\pm$ 10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Thermoplastic case.
- ON-OFF switch with lamp
- Thermal device
- Capacitor
- Terminal board
- Cable glands

Control panels



M COMP Control panel for 1 pump with single-phase motor, direct starting



Code	Type	Protector max A	Capacitor 450Vc	Motor 230V - 1~ kW	Dimensions HxBxP mm
4402000000	M COMP 4-16	4,5	16 µF	0,37	220x210x110
4402000100	M COMP 4-20	4,5	20 µF	0,55	220x210x110
4402001000	M COMP 5-20	5	20 µF	0,55	220x210x110
4402001100	M COMP 5-25	5	25 µF	0,55	220x210x110
4402002100	M COMP 6-20	6	20 µF	0,75	220x210x110
4402002300	M COMP 6-35	6	35 µF	0,75	220x210x110
4402003100	M COMP 7-25	7	25 µF	0,9	220x210x110
4402003200	M COMP 7-30	7	30 µF	0,9	220x210x110
4402004000	M COMP 8-25	8	25 µF	1,1	220x210x110
4402004100	M COMP 8-30	8	30 µF	1,1	220x210x110
4402005200	M COMP 10-35	10	35 µF	1,1	220x210x110
4402005300	M COMP 10-40	10	40 µF	1,1	220x210x110
4402006000	M COMP 12-35	12	35 µF	1,5	220x210x110
4402006200	M COMP 12-50	12	50 µF	1,5	220x210x110
4402006300	M COMP 12-60	12	60 µF	1,5	220x210x110
4402008100	M COMP 16-70	16	70 µF	2,2	220x210x110

Construction

Control panel with ON-OFF switch and capacitor for 1 pump with single-phase motor.
Suitable for use with LVBT board for level control.
Protection is provided by means of a main bi-polar switch with a phase protected against overload by means of a thermal element.

Technical data

- Mains single-phase 230V ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.
- Control through pressure switch (pressure booster set).
- Control through float switch (for filling a tank).

Components

- Thermoplastic case.
- ON-OFF switch with pilot lamp with thermal protector.
- Capacitor.
- Terminal board.
- Terminals for LVBT board for level control.
- In/Out cable glands.

On request:

- LVBT card for level control.

PFC-M Control panel for 1 pump with single-phase motor, PF control



Type	Setting A	Capacitor 450Vc	Motor 230V - 1~ kW	Dimensions HxBxP mm
PFC-M 18-16	1 - 18	16 µF	0,37	220x210x110
PFC-M 18-20	1 - 18	20 µF	0,55	220x210x110
PFC-M 18-25	1 - 18	25 µF	0,55	220x210x110
PFC-M 18-30	1 - 18	30 µF	0,75	220x210x110
PFC-M 18-35	1 - 18	35 µF	0,75	220x210x110
PFC-M 18-40	1 - 18	40 µF	1,1	220x210x110
PFC-M 18-50	1 - 18	50 µF	1,5	220x210x110
PFC-M 18-60	1 - 18	60 µF	1,5	220x210x110
PFC-M 18-70	1 - 18	70 µF	2,2	220x210x110

Construction

Control panel for controlling one pump with single-phase motor. Electronic control of the operation and dry-running protection through the power factor (PF) control.
The installation of level probes into the well is not required.
It stops the pump in case of lack of air cushion in the pressure vessel (patented system).
Displayed operating data and alarms available in four languages.

Technical data

- Mains single-phase 230V ±10% 50/60 Hz.
- Max output current: 18 A.
- Ambient temperature from -5 °C to +40 °C.
- Relative humidity: from 20% to 90% without condensation
- Protection IP 55.
- Control through pressure switch (pressure booster set).
- Control through float switch (for filling a tank).
- Alarm output signal.
- Constructed in accordance with: IEC/EN 60439-1.

Setting

- Min – Max voltage range.
- Motor rated current.
- Power factor (PF) value for dry-running protection.
- Up to four programmable restarts in case of no water condition.

Alarms (with pump stop)

- Mains failure.
- Undervoltage and overvoltage.
- Motor overload.
- No water.
- No air cushion in the pressure vessel.

Components

- Thermoplastic case.
- Capacitor.
- Terminal board.
- Display : 2x16 characters.
- 6 button key board.
- In/Out Cable glands.

On request: - RA 100 control panel for remote alarm.

Control panels



QML/A 1 D Control panel for 1 pump with single-phase motor, direct starting



Code	Type	Motor 230V - 1~	Setting	Dimensions
		kW	A	HxBxP mm
14054460000	QML/A 1 D 12A-FA	0,25 - 1,5	1 - 12	250x205x115
24054460000	QML/A 1 D 12A-FA 20	0,25 - 1,5	1 - 12	250x205x115
24054460001	QML/A 1 D 12A-FA 25	0,25 - 1,5	1 - 12	250x205x115
	QML/A 1 D 3 FT	2,2 - 3	13 - 18	400x300x160

Construction

Control panel for 1 pump with single-phase motor, direct starting for pressure booster sets and submersible drainage pumps.

Arranged for the capacitor internal connection (for pumps without built-in capacitor).

For pressure booster sets:

- with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel.
- dry-running protection with float switch or level control probes.

For submersible drainage pumps:

- automatic operating test of the pump every set hours of inactivity (with pump in the automatic operating mode).
- Pump control with signals coming from:
 - **2 float switches:** one for starting-up and stopping pump, one for the alarm maximum level (optional).
 - **3 float switches:** one for starting-up pump, one for stopping the pump and one for the alarm maximum level (optional).

Pump operation controlled by an electronic board type MPS 3000 with microprocessor which allows different modes of operation of the pump.

Technical data

- Mains single-phase 230V $\pm 10\%$ 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

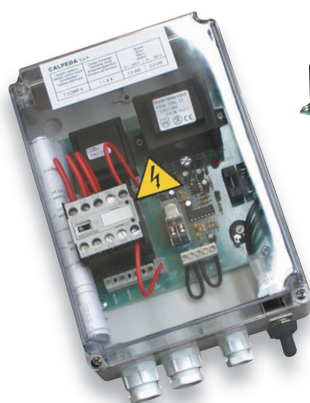
Components

- Thermoplastic case.
- Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for pressure switch connection.
- Terminals for float switch connection against dry-running.
- Cable glands.
- Remote alarm control panel or volt free contact module.

ON REQUEST:

- RA 100 - RA 100A control panel for remote alarm.
- Volt free contact control panel Q-MSP 9M.

T COMP Control panel for 1 pump with three-phase motor



LVBT



Code	Type	Protector	Motor 230V - 3~	Motor 400V - 3~	Dimensions
		A	kW	kW	HxBxP mm
14013130000	T COMP 8	1 ÷ 8	0,37 ÷ 1,5	0,5 ÷ 2,2	170x145x85
14013480000	T COMP 10	7 ÷ 10	---	3 ÷ 3,7	230x180x155
14024250000	T COMP 12	9 ÷ 12	2,2	4	230x180x155
14013560000	T COMP 16	11 ÷ 16	3	5,5	230x180x155
14013490000	T COMP 20	14 ÷ 20	3,7 - 4	7,5	230x180x155

Construction

Control panel and protection for 1 pump with three-phase motor.

Arranged for the LVBT level control internal connection against dry running (T COMP8 model has the level control as a standard).

Control pumps with pressure switch and float-type switch.

Technical data

- Mains 230V or 400V $\pm 10\%$ 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

Components

- Thermoplastic case.
- ON-OFF control switch
- Fuse holder - Contactor - Thermal relay
- Fuses for change of voltage: 230 V or 400 V - Transformer
- Terminals for pressure switch or float switch connection
- Terminals for LVBT board (for T COMP 10,12,16,20 models)
- Green LED indicator: voltage ON
- Red LED indicator: thermic block
- Cable glands

ON REQUEST:

- LVBT board for level control (for T COMP 10,12,16,20 models)

Control panels



PFC-T Control panel for 1 pump with three-phase motor, PF control



Code	Type	Motor 400V - 3~ kW	Setting A	Dimensions HxBxP mm
14058390000	PFC-T 16/A	0,37 - 5,5	1 - 16	250x205x105

Construction

Control panel for controlling 1 pump with three-phase motor. Electronic control of the operation and dry-running protection through the power factor (PF) control.

The installation of level probes into the well is not required.

It stops the pump in case of lack of air cushion in the pressure vessel
Displayed operating data and alarms, available in four languages.

Technical data

- Mains three-phase 400V - 3 ~ ±10% 50/60 Hz
- Output current: 16 A
- Ambient temperature from -5 °C to +40 °C.
- Relative humidity: from 20% to 90% without condensation
- Protection IP 55.
- Control through pressure switch (pressure booster set)
- Control through float switch (for filling a tank)
- Alarm output signal
- Constructed in accordance with: IEC/EN 60439-1.

Setting

- Min – Max voltage range
- Motor rated current
- Power factor (PF) value for dry-running protection
- Up to four programmable restarts in case of no water condition

Alarms (with pump stop)

- Phase failure - Wrong phase sequence
- Undervoltage and overvoltage
- Motor overload
- No water
- No air cushion in the pressure vessel

Components

- Thermoplastic case.
- Terminal board.
- Display : 2x16 characters. - 6 button key board.
- In/Out Cable glands.

On request: - RA 100 control panel for remote alarm.

QTL/A 1 D Control panel for 1 pump with three-phase motor, direct starting



Code	Type	Motor 400V - 3~ kW	Setting A	Dimensions HxBxP mm
14054470000	QTL/A 1 D 12A-FA	0,25 - 5,5	1 - 12	250x205x105
14054480000	QTL/A 1 D 7,5 FT	7,5	13 - 18	400x300x160
14054490000	QTL/A 1 D 9,2 FT	9,2	17 - 23	400x300x160
14054500000	QTL/A 1 D 11 FT	11	20 - 25	400x300x160

Construction

Control panel for 1 pump with three-phase motor, direct starting for pressure booster sets and submersible drainage pumps.

For pressure booster sets:

- with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel.
- dry-running protection with float switch or level control probes.

For submersible drainage pumps:

- automatic operating test of the pump every set hours of inactivity (with pump in the automatic operating mode).
- Pump control with signals coming from:
 - **2 float switches:** one for starting-up and stopping pump, one for the alarm maximum level (optional).
 - **3 float switches:** one for starting-up pump, one for stopping the pump and one for the alarm maximum level (optional).

Pump operation controlled by an electronic board type MPS 3000 with microprocessor which allows different modes of operation of the pump.

Technical data

- Mains 400V 3 ~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Thermoplastic case (metallic for 7,5-9,2-11kW).
- Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- Starting contactor and thermal relay (for 7,5-9,2-11kW).
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for pressure switch connection.
- Terminals for float switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

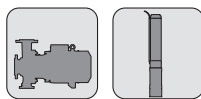
ON REQUEST:

- RA 100 - RA 100A control panel for remote alarm.
- Volt free contact control panel Q-MSP 9M.

Control panels



QTL 1 D FTE Control panel for 1 pump with three-phase motor, direct starting



Code	Type	Motor 400V - 3~ kW	Setting A	Dimensions HxBxP mm
14029820000	QTL 1 D 4 FTE	4	6,3 - 10	400x300x160
	QTL 1 D 5,5 FTE	5,5	9 - 12	400x300x160
	QTL 1 D 7,5 FTE	7,5	13 - 18	400x300x160
14050250000	QTL 1 D 9,2 FTE	9,2	17 - 23	400x300x160
14037630000	QTL 1 D 11 FTE	11	20 - 25	400x300x160
	QTL 1 D 15 FTE	15	24 - 32	500x350x200
	QTL 1 D 18,5 FTE	18,5	32 - 38	500x350x200
	QTL 1 D 22 FTE	22	35 - 50	500x350x200
	QTL 1 D 30 FTE	30	46 - 65	500x350x200

Construction

Electromechanical control panel for 1 pump with three-phase motor, direct starting.

Operating signals by E 1000 led card.

Dry-running protection with float switch.

Construction with SRLE level control for probes connection against dry-running on request .

Components

- Metal case. - Door lock master switch.
- Power circuit fuses. - Fuses for auxiliary circuit.
- Starting contactor. - Thermal relay
- Transformer. - E 1000 led card.
- Terminals for connection pump operating signal.
- Terminals for float switch connection against dry-running.
- Cable glands.

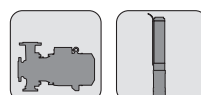
Technical data

- Mains 400V 3 ~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

ON REQUEST:

- RLE level control for probes against dry running
- RLE level control for pump operating probes.
- Voltmeter. - Ammeter.

QTL/A 1 ST FT Control panel for 1 pump with three-phase motor, Y/Δ starting



Code	Type	Motor Power kW	400V - 3~ Current A	Dimensions HxBxP mm
14054510000	QTL/A 1 ST 5,5 FT	5,5	11 - 15	600x400x200
14054520000	QTL/A 1 ST 7,5 FT	7,5	12 - 17	600x400x200
14054530000	QTL/A 1 ST 11 FT	9,2 - 11	16 - 24	600x400x200
14054540000	QTL/A 1 ST 15 FT	15	23 - 31	600x400x200
14054550000	QTL/A 1 ST 18,5 FT	18,5	30 - 39	600x400x200
14054560000	QTL/A 1 ST 22 FT	22	35 - 43	700x500x200
14054570000	QTL/A 1 ST 30B FT	30	42 - 55	700x500x200
14054580000	QTL/A 1 ST 30A FT	30	55 - 65	700x500x200
14054590000	QTL/A 1 ST 37 FT	37	61 - 84	800x600x250
14054600000	QTL/A 1 ST 45 FT	45	80 - 105	800x600x250

Construction

Control panel for 1 pump with three-phase motor, Y/Δ starting for pressure booster sets, with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel.

Pump operation controlled by an electronic card type MPS 3000 with microprocessor with different pump operating modes.

Dry-running protection with float switch or level control probes.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- Starting contactors. - Thermal relay. - Transformer.
- Electronic board MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for motor connection.
- Terminals for connection pressure switch of pump operating.
- Terminals for float switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

ON REQUEST:

- RA 100 - RA 100A control panel for remote alarm.
- Voltmeter. - Ammeter.

Technical data

- Mains 400V 3 ~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Control panels



QTL/A 1 ST FT-RH Control panel for 1 **submersible drainage** pump with three-phase motor, Y/Δ starting



Code	Type	Motor Power kW	400V - 3~	Dimensions <i>HxBxP mm</i>
			Current A	
14054610000	QTL/A 1 ST 4 FT-RH	4	7 - 11	600x400x200
14054620000	QTL/A 1 ST 5,5 FT-RH	5,5	11 - 15	600x400x200
14054630000	QTL/A 1 ST 7,5 FT-RH	7,5	12 - 17	600x400x200
14054640000	QTL/A 1 ST 11 FT-RH	9,2 - 11	16 - 24	600x400x200
14054650000	QTL/A 1 ST 15 FT-RH	15	23 - 31	600x400x200
14054660000	QTL/A 1 ST 18,5 FT-RH	18,5	30 - 39	600x400x200
14054670000	QTL/A 1 ST 22 FT-RH	22	35 - 43	700x500x250
14054680000	QTL/A 1 ST 30B FT-RH	30	42 - 55	700x500x250
14054690000	QTL/A 1 ST 30A FT-RH	30	55 - 65	700x500x250
14054700000	QTL/A 1 ST 37 FT-RH	37	61 - 84	800x600x250
14054710000	QTL/A 1 ST 45 FT-RH	45	80 - 105	800x600x250
14054720000	QTL/A 1 ST 55 FT-RH	55	100 - 125	800x600x250
14054730000	QTL/A 1 ST 75 FT-RH	75	120 - 150	900x600x300
14054740000	QTL/A 1 ST 92 FT-RH	92	155 - 255	1100x700x250

Construction

Control panel with protection for 1 submersible drainage pump with three-phase motor, Y/Δ starting.

Operation managed by the MPS 3000 electronic circuit board that has the following functions:

- automatic operating test of the pump every set hours of inactivity (with pump in the automatic operating mode).
- Pump control with signals coming from:
 - **2 float switches:** for starting-up and stopping pump, for the alarm (maximum level is optional).
 - **3 float switches:** for starting-up pump, for stopping the pump and for the alarm (maximum level is optional).

Technical data

- Mains 400V 3 ~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Metal case.
- Line selector switch with door-locking device.
- Power line fuses.
- Auxiliary circuit fuses. - Contactors.
- Y/Δ timer. - Thermal relay. - Level regulator.
- MPS 3000 type circuit board with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Connection terminals for float switches or level probes.
- Connection terminals for water seepages probe.
- Cable glands.

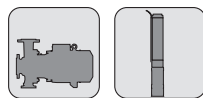
ON REQUEST:

- Volt free contact control panel Q-MSP 9M.
- RA 100 - RA 100A control panel for remote alarm.
- Voltmeter. - Ammeter.

Control panels



QTL 1 ST FTE Control panel for 1 pump with three-phase motor, Y/Δ starting



Code	Type	Motor Power kW	400V - 3~ Current A	Dimensions HxBxP mm
	QTL 1 ST 5,5 FTE	5,5	11 - 15	500x350x200
	QTL 1 ST 7,5 FTE	7,5	12 - 17	500x350x200
14029200000	QTL 1 ST 11 FTE	9,2 - 11	16 - 24	500x350x200
	QTL 1 ST 15 FTE	15	23 - 31	500x350x200
14029440000	QTL 1 ST 18,5 FTE	18,5	30 - 39	500x350x200
14031710000	QTL 1 ST 22 FTE	22	35 - 43	600x400x200
	QTL 1 ST 30B FTE	30	42 - 55	600x400x200
14048380000	QTL 1 ST 30A FTE	30	55 - 65	600x400x200
14048520000	QTL 1 ST 37 FTE	37	61 - 84	700x500x200
14047050000	QTL 1 ST 45 FTE	45	80 - 105	700x500x200
	QTL 1 ST 55 FTE	55	100 - 125	700x500x200
	QTL 1 ST 75 FTE	75	120 - 160	800x600x250
	QTL 1 ST 92 FTE	92	140 - 198	800x600x250
	QTL 1 ST 110 FTE	110	180 - 250	800x600x250

Construction

Electromechanical control panel for 1 pump with three-phase motor, Y/Δ starting.
Operating signals by E 1000 led board.
Dry-running protection with float switch.
Construction with SRLE level control for probes connection against dry-running on request .

Components

- Metal case. - Door lock master switch. - Fuses for power line.
- Fuses for auxiliary circuit. - Starting contactors. - Thermal relay.
- Y/Δ timer. - Transformer. - E 1000 led board.
- Terminals for motor connection.
- Terminals for connection of pump operating signal.
- Terminals for float switch connection against dry-running.
- Cable glands.

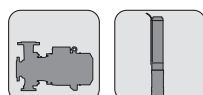
Technical data

- Mains 400V 3 ~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

ON REQUEST:

- RLE level control for probes against dry running.
- RLE level control for pump operating probes.
- Voltmeter. - Ammeter.

QTL 1 SS E Control panel for 1 pump with three-phase motor, start/stop with soft starter



Code	Type	Motor 400V - 3~ kW	Max current output max A	Dimensions HxBxP mm
	QTL 1 SS 7,5 E	7,5	17	700x500x250
14053880000	QTL 1 SS 15 E	9,2 - 11 - 15	30	700x500x250
14028440000	QTL 1 SS 22 E	18,5 - 22	45	700x500x250
	QTL 1 SS 30 E	26 - 30	60	900x600x300
14045900000	QTL 1 SS 37 E	37	75	900x600x300
	QTL 1 SS 45 E	45	85	900x600x300
	QTL 1 SS 55 E	55	110	900x600x300
	QTL 1 SS 63 E	63	125	1100x700x300
	QTL 1 SS 75 E	75	142	1100x700x300
	QTL 1 SS 90 E	90	190	1200x800x400
	QTL 1 SS 132 E	110 - 132	245	1200x800x400

Construction

Control panel for 1 pump with three-phase motor, start/stop with soft starter.
Operating signals on E 1000 led board.
Application: control of submersible motor with great cable length and surface motors.
Dry-running protection with float switch.
Construction with SRLE level control for probes connection against dry-running on request .

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- Soft starter - Transformer.
- By pass contactors (built into the soft starter) - E 1000 led board.
- Terminals for float switch or level probes connection for pump operating.
- Terminals for float switch or level probes connection against dry-running.
- Cable glands.

Technical data

- Mains 400V 3 ~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

ON REQUEST:

- RLE level control for connection level probes of pump operating.
- RLE level control for probes against dry running.
- Voltmeter. - Ammeter.

Control panels



QTL 1 IS FTE Control panel for 1 pump with three-phase motor, with Stator Impedance starter



Code	Type	Motor Power kW	400V - 3~	Dimensions <i>HxBxP mm</i>
			Current A	
---	QTL 1 IS 5,5 FTE-2RL	5,5	11 - 15	
	QTL 1 IS 7,5 FTE-2RL	7,5	12 - 17	
	QTL 1 IS 11 FTE-2RL	9,2 - 11	16 - 24	
14052700000	QTL 1 IS 15 FTE-2RL	15	23 - 31	
	QTL 1 IS 18,5 FTE-2RL	18,5	30 - 39	
	QTL 1 IS 22 FTE-2RL	22	35 - 43	
	QTL 1 IS 30 FTE-2RL	30	42- 65	
	QTL 1 IS 37 FTE-2RL	37	61 - 84	
	QTL 1 IS 45 FTE-2RL	45	80 - 105	
	QTL 1 IS 55 FTE-2RL	55	100 - 125	
	QTL 1 IS 75 FTE-2RL	75	120 - 160	
	QTL 1 IS 92 FTE-2RL	92	140 - 198	
	QTL 1 IS 110 FTE-2RL	110	180 - 250	

Construction

Electromechanical control panel for 1 submersible pump with three-phase motor, with Stator Impedance starter.

Operating signals on led board type E 1000.

Application : submersible motors control with great cable length.

Construction with SRLE level control for probes connection against dry-running .

Technical data

- Mains 400V 3 ~ $\pm 10\%$ 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- Stator Impedance - By pass contactors
- Transformer. - E 1000 led board.
- RLE level control for connection level probes of pump control.
- RLE level control for probes against dry running.
- Terminals for connection level probes or float switch for operating pump.
- Terminals for level probes or float switch connection against dry-running.
- Cable glands.

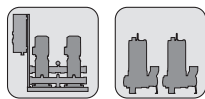
ON REQUEST:

- Voltmeter. - Ammeter.

Control panels



QML/A 2 D Control panel for 2 pumps with single-phase motor, direct starting



Code	Type	Motor 230V - 1~ kW	Protector max A	Dimensions HxBxP mm
14054750000	QML/A 2 D 12A-FA	0,25 - 1,5	1 - 12	310x235x125
24054750000	QML/A 2 D 12A-FA 20	0,25 - 1,5	1 - 12	310x235x125
24054750001	QML/A 2 D 12A-FA 25	0,25 - 1,5	1 - 12	310x235x125
24054750002	QML/A 2 D 12A-FA 30-85	0,25 - 1,5	1 - 12	395x315x135
24054750003	QML/A 2 D 12A-FA 35-85	0,25 - 1,5	1 - 12	395x315x135
	QML/A 2 D 3 FT	2,2 - 3	13 - 18	500x350x160

Control panel for 2 pumps with single-phase motor, direct starting for pressure booster sets and submersible drainage pumps. Arranged for the capacitor internal connection (for pumps without built-in capacitor).

For pressure booster sets:

- with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel.
- dry-running protection with float switch or level control probes.

For submersible drainage pumps:

- pump changing at every pump start.
- working pumps changing after 30 minutes of uninterrupted operation.
- automatic operating test of each individual pump every set hours of inactivity (with pumps in the automatic functioning mode).

- Pump control with signals coming from:

- **3 float switches:** for starting-up and stopping pump 1, for starting-up and stopping pump 2, for the alarms (maximum level is optional).
- **4 float switches:** for starting-up pump 1, for starting up pump 2, for stopping the pumps and for the alarms (maximum level is optional).

Pump operation controlled by an electronic board type MPS 3000 with microprocessor which allows different modes of operation of the pump.

Technical data

- Mains single-phase 230V $\pm 10\%$ 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

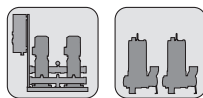
Components

- Thermoplastic case.- Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- Starting relay.
- Two capacitor (on request)
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for pressure switch connection.
- Terminals for float switch or float switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

ON REQUEST:

- Volt free contact control panel Q-MSP 13M.
- RA 100 - RA 100A control panel for remote alarm.

QTL/A 2 D Control panel for 2 pumps with three-phase motor, direct starting



Code	Type	Motor 400V - 3~ kW	Setting max A	Dimensions HxBxP mm
14054760000	QTL/A 2 D 12A-FA	0,25 - 5,5	1 - 12	310x235x125

Construction

Control panel for 2 pumps with three-phase motor, direct starting for pressure booster sets and submersible drainage pumps.

For pressure booster sets:

- with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel.
- dry-running protection with float switch or level control probes.

For submersible drainage pumps:

- pump changing at every pump start.
- working pumps changing after 30 minutes of uninterrupted operation.
- automatic operating test of each individual pump every set hours of inactivity (with pumps in the automatic functioning mode).

- Pump control with signals coming from:

- **3 float switches:** for starting-up and stopping pump 1, for starting-up and stopping pump 2, for the alarms (maximum level is optional).
- **4 float switches:** for starting-up pump 1, for starting up pump 2, for stopping the pumps and for the alarms (maximum level is optional).

Pump operation controlled by an electronic board type MPS 3000 with microprocessor which allows different modes of operation of the pump.

Technical data

- Mains 400V 3 ~ $\pm 10\%$ 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Thermoplastic case.
- Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for pressure switch connection.
- Terminals for float switch or flow switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

ON REQUEST:

- Volt free contact control panel Q-MSP 13M.
- RA 100 - RA 100A control panel for remote alarm.

Control panels



QTL/A 2 ST FT Control panel for 2 pumps with three-phase motor, Y/Δ starting



Code	Type	Motor Power kW	400V - 3~	Dimensions HxBxP mm
			Current A	
14054770000	QTL/A 2 ST 5,5 FT	5,5	11 - 15	700x500x200
14054780000	QTL/A 2 ST 7,5 FT	7,5	12 - 17	700x500x200
14054790000	QTL/A 2 ST 11 FT	9,2 - 11	16 - 24	700x500x200
14054800000	QTL/A 2 ST 15 FT	15	23 - 31	700x500x200
14054810000	QTL/A 2 ST 18,5 FT	18,5	30 - 39	700x500x200
14054820000	QTL/A 2 ST 22 FT	22	35 - 43	900x600x250
14054830000	QTL/A 2 ST 30B FT	30	42 - 55	900x600x250
14054840000	QTL/A 2 ST 30A FT	30	55 - 65	900x600x250
14054850000	QTL/A 2 ST 37 FT	37	61 - 84	1100x700x250
14054860000	QTL/A 2 ST 45 FT	45	80 - 105	1100x700x250

Construction

Control panel for 2 pumps with three-phase motor, Y/Δ starting, for pressure booster sets, with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel. Pump operation cascade mode controlled by an electronic board type MPS 3000 with microprocessor which allows different operation modes: Dry-running protection with float switch or level control probes.

Technical data

- Mains 400V ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Metal case.
- Door lock master switch.
- Fuses for power line.
- Fuses for auxiliary circuit.
- Starting contactors.
- Thermal relay.
- Y/Δ timers.
- Transformer.
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for pressure switch connection.
- Terminals for float switch or float switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

ON REQUEST:

- Volt free contact control panel Q-MSP 13M.
- RA 100 - RA 100A control panel for remote alarm.
- Voltmeter.
- Ammeter.

QTL/A 2 ST FT-RH Electric control panel for 2 drainage pumps with three-phase motor, Y/Δ starting



Code	Type	Motor Power kW	400V - 3~	Dimensions HxBxP mm
			Current A	
14054870000	QTL/A 2 ST 4 FT-RH	4	7 - 11	700x500x200
14054880000	QTL/A 2 ST 5,5 FT-RH	5,5	11 - 15	700x500x200
14054890000	QTL/A 2 ST 7,5 FT-RH	7,5	12 - 17	700x500x200
14054900000	QTL/A 2 ST 11 FT-RH	9,2 - 11	16 - 24	700x500x200
14054910000	QTL/A 2 ST 15 FT-RH	15	23 - 31	700x500x200
14054920000	QTL/A 2 ST 18,5 FT-RH	18,5	30 - 39	700x500x200
14054930000	QTL/A 2 ST 22 FT-RH	22	35 - 43	900x600x250
14054940000	QTL/A 2 ST 30B FT-RH	30	42 - 55	900x600x250
14054950000	QTL/A 2 ST 30A FT-RH	30	55 - 65	900x600x250
14054960000	QTL/A 2 ST 37 FT-RH	37	61 - 84	1100x700x250
14054970000	QTL/A 2 ST 45 FT-RH	45	80 - 105	1100x700x250
14054980000	QTL/A 2 ST 55 FT-RH	55	100 - 125	1200x800x300
14054990000	QTL/A 2 ST 75 FT-RH	75	120 - 150	1200x800x300
14055000000	QTL/A 2 ST 92 FT-RH	92	155 - 255	1400x800x400

Construction

Control panel with protection for 2 submersible drainage pumps with three-phase motor, Y/Δ starting. Operation managed by the MPS 3000 electronic circuit board that has the following functions:

- pump changing at every pump start.
- working pumps changing after 30 minutes of uninterrupted operation.
- automatic operating test of each individual pump every set hours of inactivity (with pumps in the automatic functioning mode).
- Pump control with signals coming from:
 - **3 float switches:** for starting-up and stopping pump 1, for starting-up and stopping pump 2, for the alarms (maximum level is optional).
 - **4 float switches:** for starting-up pump 1, for starting up pump 2, for stopping the pumps and for the alarms (maximum level is optional).

Technical data

- Mains 400V 3 ~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Metal case.
- Door lock master switch.
- Power line fuses.
- Auxiliary circuit fuses.
- Contactors.
- Y/Δ timers.
- Level regulator.
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for float switches.
- Connection terminals for thermal protectors.
- Connection terminals for water seepages probe.
- Connection terminals for the RA 100, RA 100A type remote alarm control panel or volt free contact module.
- Cable glands.

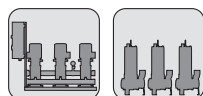
ON REQUEST:

- Volt free contact control panel Q-MSP 13M.
- RA 100 - RA 100A control panel for remote alarm.
- Voltmeter.
- Ammeter.

Control panels



QML/A 3 D Control panel for 3 pumps with single-phase motor, direct starting



Code	Type	Motor 230V - 1~ kW	Setting max A	Dimensions HxBxP mm
14055010000	QML/A 3 D 12A-FA	0,25 - 1,5	1 - 12	395x315x135

Construction

Control panel for 3 pumps with single-phase motor, direct starting for pressure booster sets, with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel. Pump operation cascade mode controlled by an electronic board type MPS 3000 with microprocessor which allows different operation modes. Dry-running protection with float switch or level control probes.

Technical data

- Mains single-phase 230V $\pm 10\%$ 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

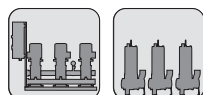
Components

- Thermoplastic case.
- Door lock master switch.
- Fuses for power line.
- Fuses for auxiliary circuit.
- Starting relay.
- Circuit breaker.
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for pressure switch connection.
- Terminals for float switch or float switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

ON REQUEST:

- Volt free contact control panel Q-MSP 13M.
- RA 100 - RA 100A control panel for remote alarm.

QTL/A 3 D Control panel for 3 pumps with three-phase motor, direct starting



Code	Type	Motor 400V - 3~ kW	Setting max A	Dimensions HxBxP mm
14055020000	QTL/A 3 D 12A-FA	0,37 - 5,5	1 - 12	395x315x135

Construction

Control panel for 3 pumps with three-phase motor, direct starting, for pressure booster sets and submersible drainage pumps.

For pressure booster sets:

- with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel.
- dry-running protection with float switch or level control probes.

For submersible drainage pumps:

- changes pumps at every pump start.
- changes working pumps after 30 minutes of uninterrupted operation.
- automatic functioning test of each individual pump every set hours of inactivity (with pumps in the automatic functioning mode).
- Pump control with signals coming from:
 - **4 float switches:** for starting-up and stopping pump, for the alarm (maximum level is optional).
 - **5 float switches:** for starting-up pump, for stopping the pumps and for the alarm (maximum level is optional).

Pump operation controlled by an electronic board type MPS 3000 with microprocessor which allows different modes of operation of the pump.

Technical data

- Mains 400V 3 ~ $\pm 10\%$ 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Components

- Thermoplastic case.
- Door lock master switch.
- Fuses for power line.
- Fuses for auxiliary circuit.
- Starting contactors.
- Thermal relay.
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for pressure switch connection.
- Terminals for float switch or flow switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

ON REQUEST:

- Volt free contact control panel Q-MSP 13M.
- RA 100 - RA 100A control panel for remote alarm.

QTL/A 3 ST FT Control panel for 3 pumps with three-phase motor, Y/Δ starting



Code	Type	Motor Power kW	400V - 3~	Dimensions HxBxP mm
			Current A	
14055030000	QTL/A 3 ST 5,5 FT	5,5	11 - 15	700x500x200
14055040000	QTL/A 3 ST 7,5 FT	7,5	12 - 17	700x500x200
14055050000	QTL/A 3 ST 11 FT	9,2 - 11	16 - 24	800x600x250
14055060000	QTL/A 3 ST 15 FT	15	23 - 31	800x600x250
14055070000	QTL/A 3 ST 18,5 FT	18,5	30 - 39	1000x600x250
14055080000	QTL/A 3 ST 22 FT	22	35 - 43	1100x700x250
14055090000	QTL/A 3 ST 30B FT	30	42 - 55	1200x800x300
14055100000	QTL/A 3 ST 30A FT	30	55 - 65	1200x800x300
14055110000	QTL/A 3 ST 37 FT	37	61 - 84	1400x800x400
14055120000	QTL/A 3 ST 45 FT	45	80 - 105	1400x800x400

Construction

Control panel for 3 pumps with three-phase motor, Y/Δ starting, for pressure booster sets, with working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel.

Pump operation cascade mode controlled by an electronic board type MPS 3000 with microprocessor which allows different operation modes: standard, emergency and timed.

Dry-running protection with float switch or level control probes.

Components

- Metal case. - Door lock master switch. - Fuses for power line.
- Fuses for auxiliary circuit. - Starting contactors.
- Thermal relay. - Y/Δ timers. - Transformer.
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Terminals for pumps connection.
- Terminals for pressure switch connection.
- Terminals for float switch or flow switch connection against dry-running.
- Terminals for remote signals - Cable glands.

Technical data

- Mains 400V ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

ON REQUEST:

- Volt free contact control panel Q-MSP 13M.
- RA 100 - RA 100A control panel for remote alarm.
- Voltmeter. - Ammeter.

QTL/A 3 ST FT-RH Electric control panel for 3 drainage pumps with three-phase motor, Y/Δ starting



Code	Type	Motor Power kW	400V - 3~	Dimensions HxBxP mm
			Current A	
14055130000	QTL/A 3 ST 4 FT-RH	4	7 - 11	700x500x200
14055140000	QTL/A 3 ST 5,5 FT-RH	5,5	11 - 15	700x500x200
14055150000	QTL/A 3 ST 7,5 FT-RH	7,5	12 - 17	700x500x200
14055160000	QTL/A 3 ST 11 FT-RH	9,2 - 11	16 - 24	800x600x250
14055170000	QTL/A 3 ST 15 FT-RH	15	23 - 31	800x600x250
14055180000	QTL/A 3 ST 18,5 FT-RH	18,5	30 - 39	1000x600x250
14055190000	QTL/A 3 ST 22 FT-RH	22	35 - 43	1100x700x250
14055200000	QTL/A 3 ST 30B FT-RH	30	42 - 55	1200x800x300
14055210000	QTL/A 3 ST 30A FT-RH	30	55 - 65	1200x800x300
14055220000	QTL/A 3 ST 37 FT-RH	37	61 - 84	1400x800x400
14055230000	QTL/A 3 ST 45 FT-RH	45	80 - 105	1400x800x400
14055240000	QTL/A 3 ST 55 FT-RH	55	100 - 125	1600x800x400
14055250000	QTL/A 3 ST 75 FT-RH	75	120 - 150	1600x1000x400
14055260000	QTL/A 3 ST 92 FT-RH	92	155 - 255	1600x1000x400

Construction

Control panel with protection for 3 submersible drainage pumps with three-phase motor, Y/Δ starting.

Operation managed by the MPS 3000 electronic circuit board that incorporates the following functions:

- changes pumps at every pump start.
- changes working pumps after 30 minutes of uninterrupted operation.
- automatic functioning test of each individual pump every set hours of inactivity (with pumps in the automatic functioning mode).

- Pump control with signals coming from:

- **4 float switches:** for starting-up and stopping pump, for the alarm (maximum level is optional).
- **5 float switches:** for starting-up pump, for stopping the pumps and for the alarm (maximum level is optional).

Technical data

- Mains 400V 3 ~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C. - Protection IP 55.

Components

- Metal case.
- Line selector switch with door-locking device.
- Power line fuses. - Auxiliary circuit fuses.
- Contactors. - Y/Δ timers.
- Electronic board type MPS 3000 with microprocessor.
- Terminals for pressure trasducer / level probes.
- Connection terminals for thermal protector.
- Connection terminals for the RA 100 - RA 100A type.
- Connection terminals for float switches.
- Connection terminals for water seepages probe.
- Cable glands.

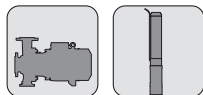
ON REQUEST:

- Volt free contact control panel Q-MSP 13M.
- RA 100 - RA 100A control panel for remote alarm .
- Voltmeter. - Ammeter.

Control panels



QML 1 VFT Control panel for 1 pump with **variable speed** three-phase motor.



Code	Type	Motor 230V - 3~ kW	Max current output max A	Dimensions HxBxP mm
---	QML 1 VFT 0,4	0,37 - 0,45	2,4	500x350x200
	QML 1 VFT 0,75	0,55 - 0,75	4,2	500x350x200
	QML 1 VFT 1,5	1,1 - 1,5	7,5	500x350x200
	QML 1 VFT 2,2	2,2	10	500x350x200

Construction

Single-phase mains supply control panel with frequency converter for 1 pump with three-phase 230V variable speed motor, for constant pressure booster sets.

Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor.

Technical data

- Mains single-phase 230V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

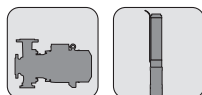
Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- EMC filter. - Frequency converter. - MPS 4000 electronic card.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling.
- Terminals board. - Terminals for remote signals
- Pressure transducer - Cable glands.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 9M.
- RA 100 control panel for remote alarm.

QTL 1 VFT Control panel for 1 pump with **variable speed** three-phase motor



Code	Type	Motor 400V - 3~ kW	Max current output max A	Dimensions HxBxP mm
14046510000	QTL 1 VFT 0,4	0,4	1,5	500x350x200
14046520000	QTL 1 VFT 0,75	0,55 - 0,75	2,3	500x350x200
14046530000	QTL 1 VFT 1,5	1,1 - 1,5	4,1	500x350x200
14046540000	QTL 1 VFT 2,2	2,2	5,5	500x350x200
14046550000	QTL 1 VFT 4	3 - 4	9,5	500x350x200
14046560000	QTL 1 VFT 5,5	5,5	14,3	600x400x250
14046570000	QTL 1 VFT 7,5	7,5	17	600x400x250
14046580000	QTL 1 VFT 11	9,2 - 11	27,7	700x500x250
14046590000	QTL 1 VFT 15	15	33	700x500x250
14046600000	QTL 1 VFT 18,5	18,5	46,3	800x600x250
14046610000	QTL 1 VFT 22	22	61,5	800x600x250
14046620000	QTL 1 VFT 30	30	74,5	900x600x250
14046630000	QTL 1 VFT 37	37	88	1100x700x300
14046640000	QTL 1 VFT 45	45	106	1200x800x300
14046650000	QTL 1 VFT 55	55	145	1200x800x300
14046660000	QTL 1 VFT 75	75	173	1200x800x300

Construction

Control panel with frequency converter for 1 pump with three-phase variable speed motor, for constant pressure booster sets.

Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor.

Technical data

- Mains 400V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- EMC filter. - Frequency converter. - MPS 4000 electronic board.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling.
- Terminals board. - Terminals for remote signals
- Pressure transducer - Cable glands.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 9M.
- RA 100 control panel for remote alarm.

Control panels



QML 2 VFT Control panel for 2 pumps with **variable speed** three-phase motor



Code	Type	Motor 230V - 3~ kW	Max current output max A	Dimensions HxBxP mm
---	QML 2 VFT 0,45	0,37 - 0,45	2,4x2	600x400x200
	QML 2 VFT 0,75	0,55 - 0,75	4,2x2	600x400x200
	QML 2 VFT 1,5	1,1 - 1,5	7,5x2	600x400x200
	QML 2 VFT 2,2	2,2	10x2	600x400x200

Construction

Single-phase mains supply control panel with frequency converter for 2 pumps with three-phase 230V variable speed motor, for constant pressure booster sets.

Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor alternating the starting order at each start.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit. - EMC filter.
- Frequency converter (1 for each pump).
- MPS 4000 electronic board.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling.
- Terminals board. - Terminals for remote signals
- Pressure transducer - Cable glands.

Technical data

- Mains single-phase 230V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 9M..
- RA 100 control panel for remote alarm.

QTL 2 VFT Control panel for 2 pumps with **variable speed** three-phase motor



Code	Type	Motor 400V - 3~ kW	Max current output max A	Dimensions HxBxP mm
14046670000	QTL 2 VFT 0,45	0,37 - 0,45	1,5x2	600x400x250
14046680000	QTL 2 VFT 0,75	0,55 - 0,75	2,3x2	600x400x250
14046690000	QTL 2 VFT 1,5	1,1 - 1,5	4,1x2	600x400x250
14046700000	QTL 2 VFT 2,2	2,2	5,5x2	600x400x250
14046710000	QTL 2 VFT 4	3 - 4	9,5x2	600x400x250
14046720000	QTL 2 VFT 5,5	5,5	14,3x2	700x500x250
14046730000	QTL 2 VFT 7,5	7,5	17x2	700x500x250
14046740000	QTL 2 VFT 11	9,2 - 11	27,7x2	900x600x250
14046750000	QTL 2 VFT 15	15	33x2	900x600x250
14046760000	QTL 2 VFT 18,5	18,5	46,3x2	1200x800x300
14046770000	QTL 2 VFT 22	22	61,5x2	1200x800x300
14046780000	QTL 2 VFT 30	30	74,5x2	1200x800x300
14046790000	QTL 2 VFT 37	37	88x2	1600x1000x400
14046800000	QTL 2 VFT 45	45	106x2	2100x1400x500
14046810000	QTL 2 VFT 55	55	145x2	2100x1400x500
14046820000	QTL 2 VFT 75	75	173x2	2100x1400x500

Construction

Control panel with frequency converter for 2 pump with three-phase variable speed motor, for constant pressure booster sets.

Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- EMC filter. - Frequency converter.
- MPS 4000 electronic board.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling. - Pressure transducer
- Terminals board. - Terminals for remote signals - Cable glands.

Technical data

- Mains 400V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 9M.
- RA 100 control panel for remote alarm.

Control panels



QML 1.1 VFT Control panel for 1 variable speed pump and 1 fixed speed pump



Code	Type	Motor 230V - 3~ kW	Max current output max A	Dimensions HxBxP mm
---	QML 1.1 VFT 0,45 - D 0,45	0,37 - 0,45	2,4	600x400x250
	QML 1.1 VFT 0,75 - D 0,75	0,55 - 0,75	4,2	600x400x250
	QML 1.1 VFT 1,5 - D 1,5	1,1 - 1,5	7,5	600x400x250
	QML 1.1 VFT 2,2 - D 2,2	2,2	10	600x400x250

Construction

Single-phase mains supply control panel with frequency converter for 2 pumps, one with three-phase 230V variable speed motor and one with fixed speed single-phase motor, for constant pressure booster sets.

Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- EMC filter. - Frequency converter.
- Starting contactors of the second pump. - Transformer.
- MPS 4000 electronic board.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling. - Pressure transducer
- Terminals board. - Terminals for remote signals - Cable glands.

Technical data

- Mains single-phase 230V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 9M.
- RA 100 control panel for remote alarm.

QTL 1.1 VFT Control panel for 1 variable speed pump and 1 fixed speed pump



Code	Type	Motor 400V - 3~ kW	Max current output (Variable) (Fixed) max A max A		Dimensions HxBxP mm
---	QTL 1.1 VFT 0,45 - D 0,45	0,37 - 0,45	1,5	1 - 1,6	600x400x250
14047460000	QTL 1.1 VFT 0,75 - D 0,75	0,55 - 0,75	2,3	1,6 - 2,5	600x400x250
14047230000	QTL 1.1 VFT 1,5 - D 1,5	1,1 - 1,5	4,1	2,5 - 4	600x400x250
14047130000	QTL 1.1 VFT 2,2 - D 2,2	2,2	5,5	4 - 6,5	600x400x250
	QTL 1.1 VFT 4 - D 3	3	9,5	4 - 6,5	600x400x250
14047160000	QTL 1.1 VFT 4 - D 4	4	9,5	6,3 - 10	600x400x250
14047120000	QTL 1.1 VFT 5,5 - D 5,5	5,5	14,3	9 - 14	700x500x250
14047030000	QTL 1.1 VFT 7,5 - ST 7,5	7,5	17	11 - 17	800x600x250
14048390000	QTL 1.1 VFT 11 - ST 11	9,2 - 11	27,7	16 - 24	800x600x250
14048210000	QTL 1.1 VFT 15 - ST 15	15	33	22 - 31	800x600x250
	QTL 1.1 VFT 18,5 - ST 18,5	18,5	46,3	30 - 39	900x600x250
14055630000	QTL 1.1 VFT 22 - ST 22	22	61,5	35 - 43	900x600x250
	QTL 1.1 VFT 30 - ST 30B	30	74,5	42 - 55	1000x800x250
	QTL 1.1 VFT 30 - ST 30A	30	74,5	55 - 65	1000x800x250
	QTL 1.1 VFT 37 - ST 37	37	88	61 - 84	1200x800x300
	QTL 1.1 VFT 45 - ST 45	45	106	80 - 105	1200x800x300
	QTL 1.1 VFT 55 - ST 55	55	145	100 - 125	1200x800x300
	QTL 1.1 VFT 75 - ST 75	75	173	120 - 160	1200x800x300

Construction

Control panel with frequency converter for 2 pumps with three-phase motor, one with variable speed and one with fixed speed motor, for constant pressure booster sets.

Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor.

Components

- Metal case. - Door lock master switch. - Fuses for power line.
- Fuses for auxiliary circuit. - EMC filter. - Frequency converter.
- Starting contactors of the second pump. - Timer (Y/Δ) from 7,5 kW.
- Transformer. - MPS 4000 electronic card.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling. - Pressure transducer
- Terminals board. - Terminals for remote signals - Cable glands.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 9M.
- RA 100 control panel for remote alarm.

Technical data

- Mains 400V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

Control panels



QML 3 VFT Control panel for 3 variable speeds pump with three-phase motor



Code	Type	Motor 230V - 3~ kW	Max current output max A	Dimensions HxBxP mm
---	QML 3 VFT 0,45	0,37 - 0,45	2,4x3	700x500x200
	QML 3 VFT 0,75	0,55 - 0,75	4,2x3	700x500x200
	QML 3 VFT 1,5	1,1 - 1,5	7,5x3	700x500x200
	QML 3 VFT 2,2	2,2	10x3	800x600x250

Construction

Single-phase mains supply control panel with frequency converter for 3 pumps with three-phase 230V variable speed motor, for constant pressure booster sets.

Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor alternating the starting order at each start.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- EMC filter. - Frequency converter (1 for each pump).
- MPS 4000 electronic card.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling.
- Terminals board. - Terminals for remote signals
- Pressure transducer - Cable glands.

Technical data

- Mains single-phase 230V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 13M.
- RA 100 control panel for remote alarm.

QTL 3 VFT Control panel for 3 pumps with variable speed three-phase motor



Code	Type	Motor 400V - 3~ kW	Max current output max A	Dimensions HxBxP mm
---	QTL 3 VFT 0,45	0,37 - 0,45	1,5x3	700x500x200
14048840000	QTL 3 VFT 0,75	0,55 - 0,75	2,3x3	700x500x200
14046930000	QTL 3 VFT 1,5	1,1 - 1,5	4,1x3	700x500x200
14047140000	QTL 3 VFT 2,2	2,2	5,5x3	800x600x250
14047040000	QTL 3 VFT 4	3 - 4	9,5x3	800x600x250
14048250000	QTL 3 VFT 5,5	5,5	14,3x3	800x600x250
14049760000	QTL 3 VFT 7,5	7,5	17x3	800x600x250
14047280000	QTL 3 VFT 11	9,2 - 11	27,7x3	1700x800x300
14050350000	QTL 3 VFT 15	15	33x3	1700x800x300
	QTL 3 VFT 18,5	18,5	46,3x3	1700x1000x400
14047150000	QTL 3 VFT 22	22	61,5x3	1700x1000x400
14047270000	QTL 3 VFT 30	30	74,5x3	1700x1000x400
14052180000	QTL 3 VFT 37	37	88x3	1200x600x300n3
	QTL 3 VFT 45	45	106x3	1400x800x400n3
	QTL 3 VFT 55	55	145x3	A richiesta
	QTL 3 VFT 75	75	173x3	A richiesta

Construction

Control panel with frequency converter for 3 pumps with variable speed three-phase motor, for constant pressure booster sets.

Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor alternating the starting order at each start.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- EMC filter. - Frequency converter (1 for each pump).
- MPS 4000 electronic card.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling. - Pressure transducer
- Terminals board. - Terminals for remote signals - Cable glands.

Technical data

- Mains 400V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 13M.
- RA 100 control panel for remote alarm.

Control panels



QTL 1.2 VFT Control panel for 1 variable speed pump and 2 fixed speed pumps



Code	Type	Motor 400V - 3~ kW	Max current output		Dimensions HxBxP mm
			(Variable) max A	(Fixed) max A	
	QTL 1.2 VFT 0,45 - D 0,45	0,37 - 0,45	1,5	1 - 1,6	600x400x200
	QTL 1.2 VFT 0,75 - D 0,75	0,55 - 0,75	2,3	1,6 - 2,5	600x400x200
14047640000	QTL 1.2 VFT 1,5 - D 1,5	1,1 - 1,5	4,1	2,5 - 4	600x400x200
14048510000	QTL 1.2 VFT 2,2 - D 2,2	2,2	5,5	4 - 6,5	600x400x200
	QTL 1.2 VFT 4 - D 3	3	9,5	4 - 6,5	600x400x200
14048260000	QTL 1.2 VFT 4 - D 4	4	9,5	6,3 - 10	600x400x200
14047200000	QTL 1.2 VFT 5,5 - D 5,5	5,5	14,3	9 - 14	700x500x200
14051640000	QTL 1.2 VFT 7,5 - ST 7,5	7,5	17	11 - 17	800x600x250
14047300000	QTL 1.2 VFT 11 - ST 11	9,2 - 11	27,7	16 - 24	800x600x250
	QTL 1.2 VFT 15 - ST 15	15	33	22 - 31	800x600x250
	QTL 1.2 VFT 18,5 - ST18,5	18,5	46,3	30 - 39	1200x800x250
14048660000	QTL 1.2 VFT 22 - ST 22	22	61,5	35 - 43	1000x800x250
	QTL 1.2 VFT 30 - ST 30B	30	74,5	42 - 55	1000x800x250
	QTL 1.2 VFT 30 - ST 30A	30	74,5	55 - 65	1000x800x250
	QTL 1.2 VFT 37 - ST 37	37	88	61 - 84	1200x800x300
	QTL 1.2 VFT 45 - ST 45	45	106	80 - 105	
	QTL 1.2 VFT 55 - ST 55	55	145	100 - 125	
	QTL 1.2 VFT 75 - ST 75	75	173	120 - 160	

Construction

Control panel with frequency converter for 3 pumps with three-phase motor: one with variable speed motor (with frequency converter) and 2 with fixed speed motor, for constant pressure booster sets. Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor alternating the starting order at each start.

Components

- Metal case. - Door lock master switch. - Fuses for power line.
- Fuses for auxiliary circuit. - EMC filter. - Frequency converter.
- Starting contactors of the second and third pump.
- Timer (Y/Δ) from 7,5 kW. - Transformer.
- MPS 4000 electronic board.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling. - Pressure transducer
- Terminals board. - Terminals for remote signals - Cable glands.

Technical data

- Mains 400V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 13M.
- RA 100 control panel for remote alarm.

QTL 4 VFT Control panel for 4 pumps with variable speed three-phase motor



Code	Type	Motor 400V - 3~ kW	Max current output max A	Dimensions HxBxP mm
	QTL 4 VFT 0,45	0,37 - 0,45	1,5x4	800x600x250
	QTL 4 VFT 0,75	0,55 - 0,75	2,3x4	800x600x250
	QTL 4 VFT 1,5	1,1 - 1,5	4,1x4	800x600x250
14049710000	QTL 4 VFT 2,2	2,2	5,5x4	900x600x250
14047840000	QTL 4 VFT 4	3 - 4	9,5x4	900x600x250
	QTL 4 VFT 5,5	5,5	14,3x4	1200x800x300
	QTL 4 VFT 7,5	7,5	17x4	1200x800x300
	QTL 4 VFT 11	9,2 - 11	27,7x4	1400x800x400
	QTL 4 VFT 15	15	33x4	1400x800x400
	QTL 4 VFT 18,5	18,5	46,3x4	2000x1800x400
14053940000	QTL 4 VFT 22	22	61,5x4	2000x1800x400
	QTL 4 VFT 30	30	74,5x4	2000x1800x400
	QTL 4 VFT 37	37	88x4	2000x1800x400
	QTL 4 VFT 45	45	106x4	2000x1800x400
	QTL 4 VFT 55	55	145x4	2000x1800x400
	QTL 4 VFT 75	75	173x4	2000x1800x400

Construction

Control panel with frequency converter for 4 pumps with variable speed three-phase motor, for constant pressure booster sets. Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor alternating the starting order at each start.

Components

- Metal case. - Door lock master switch.
- Fuses for power line. - Fuses for auxiliary circuit.
- EMC filter. - Frequency converter (1 for each pump).
- MPS 4000 electronic board.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling. - Pressure transducer
- Terminals board. - Terminals for remote signals - Cable glands.

Technical data

- Mains 400V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 13M.
- RA 100 control panel for remote alarm.

Control panels



QTL 1.3 VFT Control panel for 1 variable speed pump and 3 fixed speed pumps



Code	Type	Motor 400V - 3~ kW	Max current output (Variable) max A	(Fixed) max A	Dimensions HxBxP mm
---	QTL 1.3 VFT 0,45 - D 0,45	0,37 - 0,45	1,5	1 - 1,6	700x500x250
	QTL 1.3 VFT 0,75 - D 0,75	0,55 - 0,75	2,3	1,6 - 2,5	700x500x250
	QTL 1.3 VFT 1,5 - D 1,5	1,1 - 1,5	4,1	2,5 - 4	700x500x250
	QTL 1.3 VFT 2,2 - D 2,2	2,2	5,5	4 - 6,5	700x500x250
	QTL 1.3 VFT 4 - D 3	3	9,5	4 - 6,5	700x500x250
	QTL 1.3 VFT 4 - D 4	4	9,5	6,3 - 10	700x500x250
	QTL 1.3 VFT 5,5 - D 5,5	5,5	14,3	9 - 14	700x500x250
	QTL 1.3 VFT 7,5 - ST 7,5	7,5	17	11 - 17	1100x700x250
14046890000	QTL 1.3 VFT 11 - ST 11	9,2 - 11	27,7	16 - 24	1100x700x250
	QTL 1.3 VFT 15 - ST 15	15	33	22 - 31	1100x700x250
	QTL 1.3 VFT 18,5 - ST 18,5	18,5	46,3	30 - 39	1200x800x300
	QTL 1.3 VFT 22 - ST 22	22	61,5	35 - 43	1200x800x300
	QTL 1.3 VFT 30 - ST 30B	30	74,5	42 - 55	1200x800x300
	QTL 1.3 VFT 30 - ST 30A	30	74,5	55 - 65	1200x800x300
	QTL 1.3 VFT 37 - ST 37	37	88	61 - 84	1600x800x400
	QTL 1.3 VFT 45 - ST 45	45	106	80 - 105	1700x800x400
	QTL 1.3 VFT 55 - ST 55	55	145	100 - 125	
	QTL 1.3 VFT 75 - ST 75	75	173	120 - 160	

Construction

Control panel with frequency converter for 4 pumps with three-phase motor: one with variable speed motor (with frequency converter) and 3 with fixed speed motor, for constant pressure booster sets. Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation controlled by an electronic board type MPS 4000 with microprocessor alternating the starting order at each start.

Technical data

- Mains 400V $\pm 10\%$ 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

Components

- Metal case.
- Door lock master switch.
- Fuses for power line.
- Fuses for auxiliary circuit.
- EMC filter.
- Frequency converter.
- Starting contactors of the second, third and fourth pump.
- Timer (Y/ Δ) from 7,5 kW.
- Transformer.
- MPS 4000 electronic board.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling.
- Pressure transducer
- Terminals board.
- Terminals for remote signals
- Cable glands.

ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, control panel Q-MSP 13M.
- RA 100 control panel for remote alarm.

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