02/2015



# **Control panels**





# Index



	Sup	pply		No.	pumps			Application	
TYPE	1~	3 ~	1	2	3	4	Bore-hole	Submersible	Surface
QM	✓		1				1	1	1
М СОМР	1		1				1	1	
PFC-M	<ul> <li>Image: A second s</li></ul>		1				1		
QML 1 FT	<b>√</b>		$\checkmark$				1	1	<ul> <li>Image: A second s</li></ul>
ТСОМР		1	1				1	1	
PFC-T		1	$\checkmark$				1		
QTL 1 FT		1	$\checkmark$				1		✓
QTL 1 D FTE		1	$\checkmark$				1		✓
QTL 1 ST FT		1	$\checkmark$				1		✓
QTL 1 ST FTE		1	$\checkmark$				1		<ul> <li>Image: A start of the start of</li></ul>
QTL 1 SS E		1	1				1		1
QTL 1 IS FTE		1	1				1		
QML 2 D	1			1					
QTL 2 FT		1		<b>√</b>					
QTL 2 ST FT		1		<i>√</i>					
QML 3 FT	1				1				
QTL 3 FT		1			1				
QTL 3 ST FT		1			1				1
QTL 4 D FT		1				1			
QTL 4 ST FT		1				1			
QML 1 VFT	<b>√</b>		1						1
QTL 1 VFT		1	1						1
QML 2 VFT	<ul> <li>✓</li> </ul>			1			1		<ul> <li>Image: A second s</li></ul>
QTL 2 VFT		1		1			1		1
QML 1.1 VFT	1			1					1
QTL 1.1 VFT				1					1
QML 3 VFT	1				1				1
QTL 3 VFT		1			1				1
QTL 1.2 VFT		1			$\checkmark$				1
QTL 4 VFT		1				1			1
QTL 1.3 VFT		1				$\checkmark$			1
QMLD 1D	1		1					1	
QTLD 1D		1	1					1	
QTLD 1ST FT		1	1					<ul> <li>✓</li> </ul>	
QMLD 2D	1			1				1	
QTLD 2D				1					
QTLD 2ST FT		1		1					
QTLD 3D FT-RL					1			1	
QTLD 3 ST-RL		<ul> <li>Image: A second s</li></ul>			$\checkmark$			<ul> <li>✓</li> </ul>	



Power	Rotatio	n speed		Sta	rting		Турс	ology	
kW	Fixed Speed	Variable speed	D.O.L.	Δ/γ	Soft start	Impedance stator	Electromechanical	Electronic	page
0,3 ÷ 1,5	1		$\checkmark$				$\checkmark$		594
0,37 ÷ 2,2	$\checkmark$		$\checkmark$				$\checkmark$		595
0,37 ÷ 2,2	1		$\checkmark$					1	595
0,37 ÷ 2,2	$\checkmark$		$\checkmark$					1	596
0,37 ÷ 7,5	$\checkmark$		$\checkmark$				$\checkmark$		596
0,37 ÷ 5,5	$\checkmark$		$\checkmark$					<ul> <li>Image: A second s</li></ul>	597
0,37 ÷ 11	1		$\checkmark$					1	597
4 ÷ 30	1		$\checkmark$				1		598
5,5 ÷ 45	1			$\checkmark$				1	598
5,5 ÷ 110	$\checkmark$			1			$\checkmark$		599
7,5 ÷ 132	1				1			1	599
5,5 ÷ 110	1					1	1		600
0,37 ÷ 1,5	1		1					1	601
0,37 ÷ 5,5	1		1					1	601
5,5 ÷ 45	1			1				1	602
0,37 ÷ 2,2	1		1					1	602
0,37 ÷ 5,5	1		1					1	603
5,5 ÷ 4,5	1							1	603
0,37 ÷ 5,5	1		1					1	604
5,5 ÷ 45	1							1	604
0,37 ÷ 3,7		1	1					1	605
0,4 ÷ 7,5		1	1					1	605
0,37 ÷ 3,7		1						1	606
0,4 ÷ 7,5		1						1	606
0,37 ÷ 3,7		1						1	607
0,4 ÷ 75		1						1	607
0,37 ÷ 3,7		1						<i>·</i>	608
0,4 ÷ 75		1						1	608
0,4 ÷ 75		1						1	609
0,4 ÷ 75		<i>✓</i>						✓ ✓	609
0,4 ÷ 75		1						1	610
0,4 7 70		V						v	010
0,25 ÷ 1,1	1		1					1	611
0,25 ÷ 1,1			<i>✓</i>					<i>✓</i>	611
0,25 ÷ 1,1 4 ÷ 92	<i>✓</i>		v	1				<i>✓</i>	612
	 		<i>√</i>	V				<i>✓</i>	
0,25 ÷ 1,1			<i>s</i>					<i>✓</i>	613
0,25 ÷ 1,1			V	/					613
4 ÷ 92	<u> </u>		1	1				<i>\</i>	614
0,55 ÷ 5,5	1		1	1				1	615
4 ÷ 92	1			1				1	615



# QM Control panel for 1 single-phase submersible pump



Code	Туре	Capacitor	Motor 230V - 1~	Dimensions
		450Vc	kW	HxBxP mm
44017940000	QM 6,3	6,3 μF	0,3	200x75x76
44017960000	QM 20	20 µF	0,55 - 0,75	200x75x76
44017950000	QM 25	25 µF	0,9 -1,1	200x75x76
44017990000	QM 30	30 µF	0,9 -1,1	200x75x76
	QM 35	35 μF	1,5	200x75x76

# Construction

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

# **Technical data**

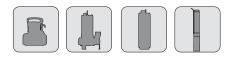
- Mains single-phase 230V ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

# Components

- Enclosure in thermoplastic material
- ON-OFF switch with lamp
- Capacitor
- Terminal board
- Cable glands

# QM Control panel with circuit breaker for 1 single-phase submersible pump





Code	Туре	Protector	Capacitor	Motor 230V - 1~	Dimensions
		max <b>A</b>	450Vc	kW	HxBxP mm
-	QM 4-16	4	16 µF	0,37	200x75x76
	QM 5-20	5	20 µF	0,55	200x75x76
	QM 5-25	5	25 μF	0,55	200x75x76
	QM 6-20	6	20 µF	0,75	200x75x76
	QM 7-25	7	25 μF	0,9	200x75x76
	QM 7-30	7	30 µF	0,75	200x75x76
	QM 8-25	8	25 μF	1,1	200x75x76
	QM 8-30	8	30 μF	1,1	200x75x76
	QM 10-40	10	40 µF	1,1	200x75x76
	QM 12-35	12	35 μF	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 ±10% 50/60 Hz
- (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

Com	pon	ents
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- Enclosure in thermoplastic material
- ON-OFF switch with lamp
- Thermal device
- Capacitor
- Terminal board
- Cable glands

# 🖃 calpeda

# M COMP Control panel for 1 single-phase submersible pump



Code	Туре	Protector	Capacitor	Motor 230V - 1~	Dimensions
		max <b>A</b>	450Vc	kW	HxBxP mm
4402000000	M COMP 4-16	4,5	16 μF	0,37	220x210x110
44020001000	M COMP 4-20	4,5	20 µF	0,55	220x210x110
44020010000	M COMP 5-20	5	20 µF	0,55	220x210x110
44020011000	M COMP 5-25	5	25 µF	0,55	220x210x110
44020021000	M COMP 6-20	6	20 µF	0,75	220x210x110
44020023000	M COMP 6-35	6	35 µF	0,9	220x210x110
44020031000	M COMP 7-25	7	25 µF	0,9	220x210x110
44020032000	M COMP 7-30	7	30 µF	0,9	220x210x110
44020040000	M COMP 8-25	8	25 μF	1,1	220x210x110
44020041000	M COMP 8-30	8	30 µF	1,1	220x210x110
44020052000	M COMP 10-35	10	35 µF	1,1	220x210x110
44020053000	M COMP 10-40	10	40 µF	1,1	220x210x110
44020060000	M COMP 12-35	12	35 μF	1,5	220x210x110
44020062000	M COMP 12-50	12	50 μF	1,5	220x210x110
	M COMP 12-60	12	60 μF	1,5	220x210x110
44020081000	M COMP 16-70	16	70 µF	2,2	220x210x110

#### Construction

Control panel with ON-OFF switch and capacitor for 1 submersible 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

- Enclosure in thermoplastic material.
- ON-OFF switch with pilot lamp with thermal protector.
- Capacitor.
- Terminal board.
- Terminals for LVBT board for level control.
- In/Out cable glands.
- Power relay (for M COMP 18 only)

#### On request:

- LVBT card for level control.

# **PFC-M Power Factor Control** Control panel for 1 submersible pump with single-phase motor, PF control



Туре	Setting	Capacitor	Motor 50/60Hz 220V-240V - 1~	Dimensions
	А	450Vc	kW	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 submersible 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 220-240V, 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**

- Enclosure in thermoplastic material. Capacitor. Terminal board.
- Display : 2x16 characters. 6 button key board.

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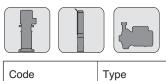
- In/Out Cable glands.

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



# QML 1 FT Control panel for 1 pump with single-phase motor, direct starting





Code	Туре	Motor 230V - 1~	Setting	Dimensions
		kW	А	HxBxP mm
	QML 1 FT 0,37	0,37	1,6 - 2,5	200x255x170
	QML 1 FT 0,55	0,45 - 0,55	2,5 - 4	200x255x170
	QML 1 FT 0,75	0,75	4 - 6,5	200x255x170
	QML 1 FT 1,1	1,1	6,3 - 10	200x255x170
	QML 1 FT 1,5	1,5	9 - 12	200x255x170

# Construction

Control panel for 1 pump with single-phase motor, direct starting for pressure booster sets, with a patented working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel.

Arranged for the capacitor internal connection (for pumps without builtin capacitor) and for the SRL 3 level control card application against dry running.

Pump operation controlled by an electronic board type MP 1000 with microprocessor which allows three different modes of operation of the pump: standard, emergency and timed.

# **Technical data**

- Mains single-phase 230V ±10% 50 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 contactor.
- Thermal relay.
- Electronic board type MP 1000 with microprocessor.
- Terminals for pressure switch connection.
- Terminals for float switch connection against dry-running.

- Cable glands. The panel is suitable for remote control of all the signals of the box (excluding pump stop led and push buttons).

#### **ON REQUEST:**

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

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



Code	Туре	Protector	Motor 230V - 3~	Motor 400V - 3~	Dimensions
		Α	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 submersible 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 ±10% 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.

- Protection IP 44.

# Components

- Enclosure in thermoplastic material
- 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)



#### PFC-T Power Factor Control Control panel for 1 submersible pump with three-phase motor, PF control



$\int$	Ì	

Setting Motor Dimensions Туре 400V 50Hz - 3~ 380V 60Hz - 3~ Α kW kW HxBxP mm kg **PFC-T 11** 1 - 11 0.37 - 4 0.37 - 4 255x200x135 1,7 **PFC-T 16** 1 - 16 5,5 5,5 255x200x135 1,7

#### Construction

Control panel for controlling 1 submersible 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 (patented system)

Displayed operating data and alarms, available in four languages.

#### Technical data

- Mains three-phase 380-400V - 3 ~ ±10% 50-60 Hz

- Output current: 11 A 16 A
- Ambient temperature from -5 °C to +40 °C.
- Relative humidity: from 20% to 90% without condensation
- IP 55 protection
- 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

- Enclosure in thermoplastic material.
- Terminal board.
- Display : 2x16 characters. 6 button key board.
- In/Out Cable glands.

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

# QTL 1 FT Control panel for 1 pump with three-phase motor, direct starting



|--|

Code	Туре	Motor 400V - 3~	Setting	Dimensions
		kW	Α	HxBxP mm
	QTL 1 FT 0,55	0,37 - 0,45 - 0,55	1 - 1,6	200x255x170
	QTL 1 FT 1,1	0,75 - 1,1	1,6 - 2,5	200x255x170
	QTL 1 FT 1,5	1,5	2,5 - 4	200x255x170
	QTL 1 FT 3	2,2 - 3	4 - 6,5	200x255x170
	QTL 1 FT 4	4	6,3 - 10	200x255x170
	QTL 1 FT 5,5	5,5	9 - 12	200x255x170
	QTL 1 D 7,5 FT	7,5	13 - 18	400x300x160
	QTL 1 D 9,2 FT	9,2	17 - 23	400x300x160
	QTL 1 D 11 FT	11	20 - 25	400x300x160

- Thermoplastic case (metallic for 7,5-9,2-11kW).

- Fuses for power line. - Fuses for auxiliary circuit.

- Electronic board type MP 1000 with microprocessor.

- Terminals for float switch connection against dry-running.

# Construction

Control panel for 1 pump with three-phase motor, direct starting for pressure booster sets, with a patented 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 MP 1000 with microprocessor which allows three different modes of operation of the pump: standard, emergency and timed.

Dry-running protection with float switch.

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

#### **Technical data**

- Mains 400V 3  $\sim\pm10\%$  50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

#### - Cable glands.

Components

- Door lock master switch.

- **ON REQUEST:**
- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M.

- Terminals for remote signals

- Starting contactor. - Thermal relay.

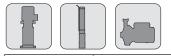
- Terminals for pressure switch connection.

- RA 100 control panel for remote alarm.



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





Code	Туре	Motor 400V - 3~	Setting	Dimensions
		kW	Α	HxBxP mm
	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
	QTL 1 D 9,2 FTE	9,2	17 - 23	400x300x160
	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 dryrunning on request .

# **Technical data**

- Mains 400V 3  $\sim\pm10\%$  50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

# 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.

#### ON REQUEST:

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

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



|--|--|--|

Code	Туре	Motor Power		
		kW	A	HxBxP mm
	QTL 1 ST 5,5 FT	5,5	11 - 15	600x400x200
	QTL 1 ST 7,5 FT	7,5	12 - 17	600x400x200
	QTL 1 ST 11 FT	9,2 - 11	16 - 24	600x400x200
	QTL 1 ST 15 FT	15	23 - 31	600x400x200
	QTL 1 ST 18,5 FT	18,5	30 - 39	600x400x200
	QTL 1 ST 22 FT	22	35 - 43	700x500x200
	QTL 1 ST 30B FT	30	42 - 55	700x500x200
	QTL 1 ST 30A FT	30	55 - 65	700x500x200
	QTL 1 ST 37 FT	37	61 - 84	800x600x250
	QTL 1 ST 45 FT	45	80 - 105	800x600x250

# Construction

Control panel for 1 pump with three-phase motor,  $Y/\Delta$  starting for pressure booster sets, with a patented 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 MP 1000 with

microprocessor wicht 3 different pump operating modes: standard, emergency and timed.

Dry-running protection with float switch.

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

# **Technical data**

- Mains 400V 3  $\sim\pm10\%$  50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.

- Protection IP 55.

# Terminals for float switch connection against dry-running. Terminals for remote signals

- Terminals for motor connection.

- Metal case. - Door lock master switch.

- Fuses for power line. - Fuses for auxiliary circuit.

- Starting contactors. - Thermal relay. - Transformer. - Electronic board MP 1000 with microprocessor.

- Terminals for connection pressure switch of pump operating.

- Cable glands.

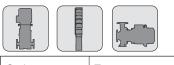
Components

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



# **QTL 1 ST FTE** Control panel for 1 pump with three-phase motor, $Y/\Delta$ starting





Code	Туре	Motor 400V - 3~		Dimensions
	l ypc	Power <b>kW</b>	Current A	HxBxP mm
	QTL 1 ST 5,5 FTE	5,5	11 - 15	500x350x200
	QTL 1 ST 7,5 FTE	7,5	12 - 17	500x350x200
	QTL 1 ST 11 FTE	9,2 - 11	16 - 24	500x350x200
	QTL 1 ST 15 FTE	15	23 - 31	500x350x200
	QTL 1 ST 18,5 FTE	18,5	30 - 39	500x350x200
	QTL 1 ST 22 FTE	22	35 - 43	600x400x200
	QTL 1 ST 30B FTE	30	42 - 55	600x400x200
	QTL 1 ST 30A FTE	30	55 - 65	600x400x200
	QTL 1 ST 37 FTE	37	61 - 84	700x500x200
	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,  $Y/\Delta$ 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 .

# **Technical data**

- Mains 400V 3 ~ ±10% 50 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.
   Υ/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.

#### **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



$\left[ \right]$		<b></b>

Code	Туре	Motor 400V - 3~	Max current outpu	Dimensions
		kW	max A	HxBxP mm
	QTL 1 SS 7,5 E	7,5	17	700x500x250
	QTL 1 SS 9,2 E	9,2	22	700x500x250
	QTL 1 SS 15 E	11 - 15	34	700x500x250
	QTL 1 SS 22 E	18,5 - 22	48	700x500x250
	QTL 1 SS 26 E	26	58	900x600x300
	QTL 1 SS 30 E	30	68	900x600x300
	QTL 1 SS 37 E	37	82	900x600x300
	QTL 1 SS 45 E	45	92	900x600x300
	QTL 1 SS 55 E	55	114	900x600x300
	QTL 1 SS 63 E	63	126	1100x700x300
	QTL 1 SS 75 E	75	150	1100x700x300
	QTL 1 SS 92 E	92	196	1200x800x400
	QTL 1 SS 110 E	110	231	1200x800x400
	QTL 1 SS 132 E	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 dryrunning on request .

# Technical data

- Mains 400V 3 ~ ±10% 50 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.
- 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.

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- Cable glands.

# **ON REQUEST:**

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

- Voltmeter. - Ammeter.



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





Code	Туре	Motor Power <b>kW</b>	400V - 3~ Current <b>A</b>	Dimensions HxBxP mm
	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	
	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 Impedence 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 dryrunning.

# **Technical data**

- Mains 400V 3 ~ ±10% 50 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 Impedence 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.



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





Code	Туре	Motor 230V - 1~	Protector	Dimensions
		kW	max <b>A</b>	HxBxP mm
	QML 2 D 0,45	0,37 - 0,45	4	200x255x110
	QML 2 D 0,55	0,55	6	200x255x110
	QML 2 D 0,75	0,75	7	200x255x110
	QML 2 D 1,1	1,1	9	200x255x110
	QML 2 D 1,5	1,5	12	200x255x110

#### Construction

Control panel for 2 pumps with single-phase motor, direct starting for pressure booster sets, with a patented working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel. Arranged for SRL 3 level control application for probes connection against

dry-running. Pump operation cascade mode controlled by an electronic board type MP 2000 with microprocessor which allows three different operation modes: standard, emergency and timed.

#### **Technical data**

- Mains single-phase 230V ±10% 50 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.
- Two capacitor (on request)
- Electronic board type MP 2000 with microprocessor.
- Terminals for pressure switch connection.
- Terminals for float switch or float switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

#### ON REQUEST:

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

# QTL 2 FT Control panel for 2 pumps with three-phase motor, direct starting



Code	Туре	Motor 400V - 3~	Setting	Dimensions
		kW	max <b>A</b>	HxBxP mm
	QTL 2 FT 0,45	0,37 - 0,45	0,9 - 1,5	230x310x130
	QTL 2 FT 0,55	0,55	1,4 - 2,3	230x310x130
	QTL 2 FT 1,1	0,75 - 1,1	2 - 3,3	230x310x130
	QTL 2 FT 1,5	1,5	3 - 5	230x310x130
	QTL 2 FT 3	2,2 - 3	4,5 - 7,5	230x310x130
	QTL 2 FT 4	4	6,3 - 10	230x310x130
	QTL 2 FT 5,5	5,5	9 - 12	230x310x130

# Construction

Control panel for 2 pumps with three-phase motor, direct starting for pressure booster sets, with a patented working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel. Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation cascade mode controlled by an electronic board type MP 2000 with microprocessor which allows three different operation modes: standard, emergency and timed.

#### **Technical data**

- Mains 400V 3 ~ ±10% 50 Hz (other voltages on request).
- Ambient temperature from -5  $^{\circ}$ C to +40  $^{\circ}$ C.
- Protection IP 55.

#### Components

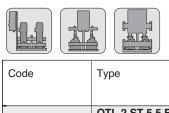
- Thermoplastic case.Door lock master switch.
- Fuses for power line. Fuses for auxiliary circuit.
- Starting contactors. Thermal relay.
- Electronic board type MP 2000 with microprocessor.
- Terminals for pressure switch connection.
- Terminals for float switch or flow switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

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



# **QTL 2 ST FT** Control panel for 2 pumps with three-phase motor, $Y/\Delta$ starting





Code	Туре	Motor Power <b>kW</b>	400V - 3~ Current <b>A</b>	Dimensions HxBxP mm
	QTL 2 ST 5,5 FT	5,5	11 - 15	700x500x200
	QTL 2 ST 7,5 FT	7,5	12 - 17	700x500x200
	QTL 2 ST 11 FT	9,2 - 11	16 - 24	700x500x200
	QTL 2 ST 15 FT	15	23 - 31	700x500x200
	QTL 2 ST 18,5 FT	18,5	30 - 39	700x500x200
	QTL 2 ST 22 FT	22	35 - 43	900x600x250
	QTL 2 ST 30B FT	30	42 - 55	900x600x250
	QTL 2 ST 30A FT	30	55 - 65	900x600x250
	QTL 2 ST 37 FT	37	61 - 84	1100x700x250
	QTL 2 ST 45 FT	45	80 - 105	1100x700x250

#### Construction

Control panel for 2 pumps with three-phase motor,  $Y/\Delta$  starting, for pressure booster sets, with a patented 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 MP 2000 with microprocessor which allows three different operation modes: standard, emergency and timed.

#### **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/A timers. Transformer.
- Electronic board type MP 2000 with microprocessor.
- Terminals for pressure switch connection.
- Terminals for float switch or float switch connection against dry-running.
- Terminals for remote signals Cable glands.

#### ON REQUEST:

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

# QML 3 FT Control panel for 3 pumps with single-phase motor, direct starting



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Code	Туре	Motor 230V - 1~	Setting	Dimensions
		kW	max <b>A</b>	HxBxP mm
	QML 3 FT 0,37	0,37	1,6 - 2,5	390x470x130
	QML 3 FT 0,55	0,45 - 0,55	2,5 - 4	390x470x130
	QML 3 FT 0,75	0,75	4 - 6,5	390x470x130
	QML 3 FT 1,1	1,1	6,3 - 10	390x470x130
	QML 3 FT 1,5	1,5	9 - 12	390x470x130
	QML 3 FT 2,2	2,2	13 - 18	390x470x130

#### Construction

Control panel for 2 pumps with single-phase motor, direct starting for pressure booster sets, with a patented working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel . Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation cascade mode controlled by an electronic board type MP 2000 with microprocessor which allows three different operation modes: standard, emergency and timed.

#### **Technical data**

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

# - SBL 3 level control for r

- Cable glands.

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

# Components

- Thermoplastic case.Door lock master switch.
- Fuses for power line. Fuses for auxiliary circuit.
- Starting relay. Circuit breaker.

- Terminals for remote signals

- Electronic board type MP 3000 with microprocessor.
- Terminals for pressure switch connection.
- Terminals for float switch or float switch connection against dry-running.



# QTL 3 FT Control panel for 3 pumps with three-phase motor, direct starting



Code	Туре	Motor 400V - 3~	Setting	Dimensions
		kW	max A	HxBxP mm
	QTL 3 FT 0,55	0,37 - 0,45 - 0,55	1 - 1,6	470x390x170
	QTL 3 FT 1,1	0,75 - 1,1	1,6 - 2,5	470x390x170
	QTL 3 FT 1,5	1,5	2,5 - 4	470x390x170
	QTL 3 FT 3	2,2 - 3	4 - 6,5	470x390x170
	QTL 3 FT 4	4	6,3 - 10	470x390x170
	QTL 3 FT 5,5	5,5	9 - 12	470x390x170

#### Construction

Control panel for 3 pumps with three-phase motor, direct starting, for pressure booster sets, with a patented working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel. Arranged for SRL 3 level control application for probes connection against dry-running.

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

# **Technical data**

- Mains 400V 3 ~ ±10% 50 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 MP 3000 with microprocessor.
- Terminals for pressure switch connection.
- Terminals for float switch or flow switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

#### ON REQUEST:

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

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



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Code	Туре	Motor Power <b>kW</b>	400V - 3~ Current <b>A</b>	Dimensions HxBxP mm
	QTL 3 ST 5,5 FT	5,5	11 - 15	800x600x250
	QTL 3 ST 7,5 FT	7,5	12 - 17	800x600x250
	QTL 3 ST 11 FT	9,2 - 11	16 - 24	800x600x250
	QTL 3 ST 15 FT	15	23 - 31	800x600x250
	QTL 3 ST 18,5 FT	18,5	30 - 39	1000x600x250
	QTL 3 ST 22 FT	22	35 - 43	1100x700x250
	QTL 3 ST 30B FT	30	42 - 55	1200x800x300
	QTL 3 ST 30A FT	30	55 - 65	1200x800x300
	QTL 3 ST 37 FT	37	61 - 84	1400x800x400
	QTL 3 ST 45 FT	45	80 - 105	1400x800x400

# Construction

Control panel for 3 pumps with three-phase motor,  $Y/\Delta$  starting, for pressure booster sets, with a patented working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel. Arranged for SRL 3 level control application for probes connection against dry-running.

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

# **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 module MSP 1M.

- RA 100 control panel for remote alarm.

# Components

- Metal case. Door lock master switch. Fuses for power line.
- Fuses for auxiliary circuit. Starting contactors. Thermal relay.  $Y/\Delta$  timers. Transformer.
- Electronic board type MP 3000 with microprocessor.
- Terminals for pumps connection.
- Terminals for process owitch con
- Terminals for pressure switch connection.
- Terminals for float switch or flow switch connection against dry-running.
   Terminals for remote signals Cable glands.

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# QTL 4 D FT Control panel for 4 pumps with three-phase motor, direct starting





Code	Туре	Motor 400V - 3~	Setting	Dimensions	
		kW	max <b>A</b>	HxBxP mm	
	QTL 4 D 0,55 FT	0,37- 0,45 - 0,55	1 - 1,6	600x400x200	
	QTL 4 D 1,1 FT	0,75 - 1,1	1,6 - 2,5	600x400x200	
	QTL 4 D 1,5 FT	1,5	2,5 - 4	600x400x200	
	QTL 4 D 3 FT	2,2 - 3	4 - 6,5	600x400x200	
	QTL 4 D 4 FT	4	6,3 - 10	600x400x200	
	QTL 4 D 5,5 FT	5,5	9 - 12	600x400x200	

# Construction

Control panel for 4 pumps with three-phase motor, direct starting, for pressure booster sets, with a patented working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel. Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation cascade mode controlled by an electronic board type MP 6000 with microprocessor alternating the starting order and allows three different operation modes: standard, emergency and timed.

#### **Technical data**

- Mains 400V 3 ~ ±10% 50 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. Transformer.
- Electronic board type MPS 6000 with microprocessor.
- Terminals for pressure transducer connection.
- Terminals for float switch connection against dry-running.
- Terminals for remote signals
- Cable glands.

#### **ON REQUEST:**

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

# QTL 4 ST FT Control panel for 4 pumps with three-phase motor, Y/A starting



# 5,5 ÷ 45 kW

Code	Туре	Motor Power <b>kW</b>	400V - 3~ Current <b>A</b>	Dimensions HxBxP mm
	QTL 4 ST 5,5 FT	5,5	11 - 15	
	QTL 4 ST 7,5 FT	7,5	12 - 17	900x600x250
	QTL 4 ST 11 FT	11	16 - 24	900x600x250
	QTL 4 ST 15 FT	15	23 - 31	1000x800x250
	QTL 4 ST 18,5 FT	18,5	30 - 39	1000x800x250
	QTL 4 ST 22 FT	22	35 - 43	1200x800x250
	QTL 4 ST 30B FT	30	42 - 55	1200x800x250
	QTL 4 ST 30A FT	30	55 - 65	1200x800x250
	QTL 4 ST 37 FT	37	61 - 84	1400x800x400
	QTL 4 ST 45 FT	45	80 - 105	1400x800x400

- Fuses for auxiliary circuit. - Starting contactors.

- Thermal relay. - Y/A timers. - Transformer.

# Construction

Control panel for 3 pumps with three-phase motor,  $Y/\Delta$  starting, for pressure booster sets, with a patented working time-measuring system that stops the pump in case of lack of air cushion in the pressure vessel. Arranged for SRL 3 level control application for probes connection against dry-running.

Pump operation cascade mode controlled by an electronic board type MP 6000 with microprocessor alternating the starting order and allows three different operation modes: standard, emergency and timed.

# Technical data

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

- Protection IP 55.

# - Terminals for pressure transducer connection.

Components

- Terminals for float switch connection against dry-running.

- Electronic board type MPS 6000 with microprocessor.

- Metal case. - Door lock master switch. - Fuses for power line.

- Terminals for remote signals - Cable glands.

- Terminals for pumps connection.

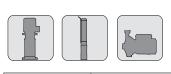
#### **ON REQUEST:**

- SRL 3 level control for probes against dry running - Voltmeter. - Ammeter.



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





Code	Туре	Motor 230V - 3~	Max current	Dimensions
		kW	outpu max <b>A</b>	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 ±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, MPS 9M.
- RA 100 control panel for remote alarm.

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



Code	Туре	Motor 400V - 3~	Max current outpu	Dimensions
		kW	max A	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	600x400x200
14046570000	QTL 1 VFT 7,5	7,5	17	600x400x200
14046580000	QTL 1 VFT 11	9,2 - 11	27,7	700x500x200
14046590000	QTL 1 VFT 15	15	33	700x500x200
14046600000	QTL 1 VFT 18,5	18,5	41	800x600x250
14046610000	QTL 1 VFT 22	22	48	800x600x250
14046620000	QTL 1 VFT 30	30	66	800x600x250
14046630000	QTL 1 VFT 37	37	79	1100x700x300
14046640000	QTL 1 VFT 45	45	94	1200x800x300
14046650000	QTL 1 VFT 55	55	116	1200x800x300
14046660000	QTL 1 VFT 75	75	160	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.

# 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.

# **Technical data**

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

- Protection IP 44.

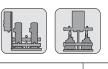
- SRL 3 level control for probes against dry running - Volt free contact module MSP 1M, MPS 9M.

- RA 100 control panel for remote alarm.



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





Motor 230V - 3~ Max current Dimensions Code Type outpu kW HxBxP mm max A 600x400x200 QML 2 VFT 0,4 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

# 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.

#### **Technical data**

- Mains single-phase 230V ±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 (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.

#### ON REQUEST:

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

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



Code	Туре	Motor 400V - 3~	Max current	Dimensions
		kW	outpu max <b>A</b>	HxBxP mm
14046670000	QTL 2 VFT 0,4	0,4	1,5x2	600x400x200
14046680000	QTL 2 VFT 0,75	0,55 - 0,75	2,3x2	600x400x200
14046690000	QTL 2 VFT 1,5	1,1 - 1,5	4,1x2	600x400x200
14046700000	QTL 2 VFT 2,2	2,2	5,5x2	600x400x200
14046710000	QTL 2 VFT 4	3 - 4	9,5x2	600x400x200
14046720000	QTL 2 VFT 5,5	5,5	14,3x2	700x500x200
14046730000	QTL 2 VFT 7,5	7,5	17x2	700x500x200
14046740000	QTL 2 VFT 11	9,2 - 11	27,7x2	1000x800x250
14046750000	QTL 2 VFT 15	15	33x2	1000x800x250
14046760000	QTL 2 VFT 18,5	18,5	41x2	1200x800x300
14046770000	QTL 2 VFT 22	22	48x2	1200x800x300
14046780000	QTL 2 VFT 30	30	66x2	1200x800x300
14046790000	QTL 2 VFT 37	37	79x2	1600x1000x400
14046800000	QTL 2 VFT 45	45	94x2	2100x1400x500
14046810000	QTL 2 VFT 55	55	116x2	2100x1400x500
14046820000	QTL 2 VFT 75	75	160x2	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 ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 44.

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



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





Code	Туре	Motor 230V - 3~	Max current outpu	Dimensions
		kW	max A	HxBxP mm
	QML 1.1 VFT 0,4 - D 0,4	0,37 - 0,45	2,4	600x400x200
	QML 1.1 VFT 0,75 - D 0,75	0,55 - 0,75	4,2	600x400x200
	QML 1.1 VFT 1,5 - D 1,5	1,1 - 1,5	7,5	600x400x200
	QML 1.1 VFT 2,2 - D 2,2	2,2	10	600x400x200

# 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 alternating the starting order at each start.

#### **Technical data**

- Mains single-phase 230V ±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 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.

#### ON REQUEST:

- SRL 3 level control for probes against dry running
- Volt free contact module MSP 1M, MPS 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	Туре	Motor 400V - 3~	Max current	Dimensions
		kW	outpu max <b>A</b>	HxBxP mm
	QTL 1.1 VFT 0,4 - D 0,4	0,4	1,5	600x400x200
14047460000	QTL 1.1 VFT 0,75 - D 0,75	0,55 - 0,75	2,3	600x400x200
14047230000	QTL 1.1 VFT 1,5 - D 1,5	1,1 - 1,5	4,1	600x400x200
14047130000	QTL 1.1 VFT 2,2 - D 2,2	2,2	5,5	600x400x200
	QTL 1.1 VFT 4 - D 3	3	9,5	600x400x200
14047160000	QTL 1.1 VFT 4 - D 4	4	9,5	600x400x200
14047120000	QTL 1.1 VFT 5,5 - D 5,5	5,5	14,3	700x500x200
14047030000	QTL 1.1 VFT 7,5 - ST 7,5	7,5	17	700x500x200
14048390000	QTL 1.1 VFT 11 - ST 11	9,2 - 11	27,7	800x600x250
14048210000	QTL 1.1 VFT 15 - ST 15	15	33	800x600x250
	QTL 1.1 VFT 22 - ST 18,5	18,5	41	1000x800x250
	QTL 1.1 VFT 22 - ST 22	22	48	1000x800x250
	QTL 1.1 VFT 30 - ST 30B	30	66	1000x800x250
	QTL 1.1 VFT 30 - ST 30A	30	66	1000x800x250
	QTL 1.1 VFT 37 - ST 37	37	79	1200x800x300
	QTL 1.1 VFT 45 - ST 45	45	94	1200x800x300
	QTL 1.1 VFT 55 - ST 55	55	116	1200x800x300
	QTL 1.1 VFT 75 - ST 75	75	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 alternating the starting order at each start.

#### **Technical data**

- Mains 400V ±10% 50/60 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. Eusos for auviliant circuit. EMC filter. Erequency converter.

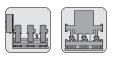
- Fuses for auxiliary circuit. EMC filter. Frequency converter.
- Starting contactors of the second pump. Timer (Y/ $\Delta$ ) from 7,5 kW.
- Transformer. MPS 4000 electronic card.
- Interface for MPS 4000 electronic board.
- Ventilator for electric panel cooling. Pressure transducer
- Terminals board. Terminals for remote signals Cable glands.

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



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





Code	Туре	Motor 230V - 3~	Max current outpu	Dimensions
		kW	max A	HxBxP mm
	QML 3 VFT 0,4	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	700x500x200
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# 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.

#### **Technical data**

- Mains single-phase 230V ±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 (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.

#### ON REQUEST:

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

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



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Code	Туре	Motor 400V - 3~	Max current outpu	Dimensions
		kW	max A	HxBxP mm
	QTL 3 VFT 0,4	0,4	1,5x3	700x500x200
	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	700x500x200
14047040000	QTL 3 VFT 4	3 - 4	9,5x3	700x500x200
14048250000	QTL 3 VFT 5,5	5,5	14,3x3	1000x800x250
	QTL 3 VFT 7,5	7,5	17x3	1000x800x250
	QTL 3 VFT 11	9,2 - 11	27,7x3	1700x1000x400
	QTL 3 VFT 15	15	33x3	1700x1000x400
14047150000	QTL 3 VFT 22	18,5 - 22	48x3	1700x1000x400
14047270000	QTL 3 VFT 30	30	66x3	1700x1000x400
	QTL 3 VFT 37	37	79x3	A richiesta
	QTL 3 VFT 45	45	94x3	A richiesta
	QTL 3 VFT 55	55	116x3	A richiesta
	QTL 3 VFT 75	75	160x3	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.

# **Technical data**

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

- Protection IP 44.

# EMC filter. - Frequency converter (1 for each pump). MPS 4000 electronic card.

Components

- Interface for MPS 4000 electronic board.

- Metal case. - Door lock master switch.

- 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

- Fuses for power line. - Fuses for auxiliary circuit.

- Volt free contact module MSP 1M, MPS 13M.
- RA 100 control panel for remote alarm.

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



Code	Туре	Motor 400V - 3~	Max current outpu	Dimensions
		kW	max A	HxBxP mm
	QTL 1.2 VFT 0,4 - D 0,4	0,4	1,5	600x400x200
	QTL 1.2 VFT 0,75 - D 0,75	0,55 - 0,75	2,3	600x400x200
14047640000	QTL 1.2 VFT 1,5 - D 1,5	1,1 - 1,5	4,1	600x400x200
14048510000	QTL 1.2 VFT 2,2 - D 2,2	2,2	5,5	600x400x200
	QTL 1.2 VFT 4 - D 3	3	9,5	600x400x200
14048260000	QTL 1.2 VFT 4 - D 4	4	9,5	600x400x200
14047200000	QTL 1.2 VFT 5,5 - D 5,5	5,5	14,3	700x500x200
	QTL 1.2 VFT 7,5 - ST 7,5	7,5	17	800x600x250
14047300000	QTL 1.2 VFT 11 - ST 11	9,2 - 11	27,7	900x600x250
	QTL 1.2 VFT 15 - ST 15	15	33	900x600x250
	QTL 1.2 VFT 22 - ST18,5	18,5	41	900x600x250
14048660000	QTL 1.2 VFT 22 - ST 22	22	48	1000x800x250
	QTL 1.2 VFT 30 - ST 30B	30	66	1000x800x250
	QTL 1.2 VFT 30 - ST 30A	30	66	1000x800x250
	QTL 1.2 VFT 37 - ST 37	37	79	1200x800x300
	QTL 1.2 VFT 45 - ST 45	45	94	
	QTL 1.2 VFT 55 - ST 55	55	116	
	QTL 1.2 VFT 75 - ST 75	75	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.

#### **Technical data**

- Mains 400V ±10% 50/60 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 and third pump.
- Timer  $(Y/\Delta)$  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, MPS 13M.
- RA 100 control panel for remote alarm.

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



Code	Туре	Motor 400V - 3~	Max current	Dimensions			
		kW	outpu max <b>A</b>	HxBxP mm			
	QTL 4 VFT 0,4	0,4	1,5x4	900x600x250			
	QTL 4 VFT 0,75	0,55 - 0,75	2,3x4	900x600x250			
	QTL 4 VFT 1,5	1,1 - 1,5	4,1x4	900x600x250			
	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	1700x1000x400			
	QTL 4 VFT 15	15	33x4	1700x1000x400			
	QTL 4 VFT 22	18,5 - 22	48x4	2000x1800x400			
	QTL 4 VFT 30	30	66x4	2000x1800x400			
	QTL 4 VFT 37	37	79x4	2000x1800x400			
	QTL 4 VFT 45	45	94x4	2000x1800x400			
	QTL 4 VFT 55	55	116x4	2000x1800x400			
	QTL 4 VFT 75	75	160x4	2000x1800x400			
	Components						

#### 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.

# **Technical data**

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

- Protection IP 44.

#### - 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.

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



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



Code	Туре	Motor 400V - 3~	Max current outpu	Dimensions
		kW	max A	HxBxP mm
	QTL 1.3 VFT 0,4 - D 0,4	0,4	1,5	800x600x250
	QTL 1.3 VFT 0,75 - D 0,75	0,55 - 0,75	2,3	800x600x250
	QTL 1.3 VFT 1,5 - D 1,5	1,1 - 1,5	4,1	800x600x250
	QTL 1.3 VFT 2,2 - D 2,2	2,2	5,5	800x600x250
	QTL 1.3 VFT 4 - D 3	3	9,5	800x600x250
	QTL 1.3 VFT 4 - D 4	4	9,5	800x600x250
	QTL 1.3 VFT 5,5 - D 5,5	5,5	14,3	1100x700x250
	QTL 1.3 VFT 7,5 - ST 7,5	7,5	17	1100x700x250
14046890000	QTL 1.3 VFT 11 - ST 11	9,2 - 11	27,7	1200x800x300
	QTL 1.3 VFT 15 - ST 15	15	33	1200x800x300
	QTL 1.3 VFT 22 - ST 18,5	18,5	41	1200x800x300
	QTL 1.3 VFT 22 - ST 22	22	48	1200x800x300
	QTL 1.3 VFT 30 - ST 30B	30	66	1200x800x300
	QTL 1.3 VFT 30 - ST 30A	30	66	1200x800x300
	QTL 1.3 VFT 37 - ST 37	37	79	1700x800x400
	QTL 1.3 VFT 45 - ST 45	45	94	1700x800x400
	QTL 1.3 VFT 55 - ST 55	55	116	
	QTL 1.3 VFT 75 - ST 75	75	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 ±10% 50/60 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/ $\Delta$ ) 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.

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



# QMLD 1 D Control panel for 1 submersible drainage pump with single-phase motor, direct starting





Code	Туре	Motor 230V - 1~	Setting	Capacitor	Dimensions
		kW	Α	450Vc	HxBxP mm
	QMLD 1D 12A-FA	0,25 ÷ 1,1	1 ÷ 12 A	-	200x255x135
	QMLD 1D 12A-FA-20	0,25 ÷ 1,1	1 ÷ 12 A	20 µF	200x255x135
	QMLD 1D 12A-FA-25	0,25 ÷ 1,1	1 ÷ 12 A	25 μF	200x255x135

#### Construction

Control panel with protection for 1 submersible drainage pump with single-phase motor, with a 12A max. nominal current.

Possibility to install one capacitor inside the control panel, for pumps without capacitor inside the motor.

Operation managed by a DR 1000 type electronic board with microprocessor that has the following functions:

- automatic operating test of the pump every 48 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).

# **Technical data**

- Mains: 230V 1~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

# Components

- Thermoplastic case.
- Line selector switch with door-locking device.
- Power line fuses.
- Auxiliary circuit fuses.
- Starting-up relay.
- Amperometric transformer.Capacitor (on request).
- DR 1000 type electronic board with microprocessor.
- Terminals for capacitor connection.
- Terminals for float switches connection.
- Terminals for connection of remote alarm control panel RA 100E, RA 100A type.
- Cable glands.
- The panel is suitable for remote control of all the signals of the box.

#### **ON REQUEST:**

- Volt free contact module MSP 1M MSP 9M.
- RA 100 RA 100A control panel for remote alarm.

# QTLD 1 D Control panel for 1 submersible drainage pump with three-phase motor, direct starting



Code	Туре	Motor 400V - 3~	Setting	Dimensions
		kW	Α	HxBxP mm
14039020000	QTLD 1D 12A-FA	0,25 ÷ 5	1 ÷ 12 A	200x255x135

# Construction

Control panel with protection for 1 submersible drainage pump with three-phase motor, with a 12A max. nominal current.

- Operation managed by a DR 1000 type electronic board with microprocessor that has the following functions:
- automatic operating test of the pump every 48 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).

#### **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. - Line selector switch with door-locking device.
- Power line fuses.
- Auxiliary circuit fuses.

**ON REQUEST:** 

- Contactor.
- Amperometric transformer.
- DR 1000 electronic board with microprocessor.
- Terminals for float switches connection.

- Volt free contact module MSP 1M - MSP 9M.

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

Connection terminals for the RA 100 RA 100A type remote alarm control panel or volt free contact module.
 Cable glands.

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# QTLD 1 ST FT Control panel for 1 submersible drainage pump with three-phase motor, Y/A starting

	Code	Туре		Motor 4 Power <b>kW</b>	100V - 3~ Current A	Dimensions HxBxP mm
		QTLD 1ST 4 FT	-RL	4	7 - 11	600x400x200
		QTLD 1ST 5,5 FT	-RL	5,5	11 - 15	600x400x200
		QTLD 1ST 7,5 FT	-RL	7,5	12 - 17	600x400x200
		QTLD 1ST 11 FT	-RL	9,2 - 11	16 - 24	600x400x200
		QTLD 1ST 15 FT	-RL	15	23 - 31	600x400x200
		QTLD 1ST 18,5 FT	-RL	18,5	30 - 39	600x400x200
		QTLD 1ST 22 FT	-RL	22	35 - 43	700x500x250
A		QTLD 1ST 30B FT	-RL	30	42 - 55	700x500x250
		QTLD 1ST 30A FT	-RL	30	55 - 65	700x500x250
		QTLD 1ST 37 FT	-RL	37	61 - 84	800x600x250
6		QTLD 1ST 45 FT	-RL	45	80 - 105	800x600x250
		QTLD 1ST 55 FT	-RL	55	100 - 125	1100x700x250
		QTLD 1ST 75 FT	-RL	75	120 - 150	1100x700x250
		QTLD 1ST 92 FT	-RL	92	155 - 255	1100x700x250

# Construction

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

Operation managed by the DR1000 electronic circuit board that has the following functions:

- automatic operating test of the pump every 24 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 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/ $\Delta$  timer. Thermal relay. Level regulator.
- DR 1000 type circuit board with microprocessor.
- Connection terminals for float switches or level probes.
- 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 module MSP 1M MSP 9M.
- RA 100 RA 100A control panel for remote alarm.
- Voltmeter. Ammeter.



#### QMLD 2 D Control panel for 2 submersible drainage pumps with single-phase motor, direct starting



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Code	Туре	Motor 230V - 1~	Setting	Capacitor	Dimensions
		kW	Α	450Vc	HxBxP mm
	QMLD 2D 12A-FA	0,25 ÷ 1,1	1 ÷ 12 A	-	230x310x130
	QMLD 2D 12A-FA 20	0,25 ÷ 1,1	1 ÷ 12 A	2x20 μF	230x310x130
	QMLD 2D 12A-FA 25	0,25 ÷ 1,1	1 ÷ 12 A	2x25 μF	230x310x130
	QMLD 2D 12A-FA 35-85	0,25 ÷ 1,1	1 ÷ 12 A	2x35 μF	470x390x170

# Construction

Control panel with protection for 2 submersible drainage pumps with single-phase motor, with a 12A max. nominal current.

Possibility to install two capacitors inside the control panel, for pump without capacitor inside the motor.

Operation managed by the DR 2000 electronic 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 48 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: 230V 1~ ±10% 50/60 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

# Components

- Box in thermoplastic material.
- Line selector switch with door-locking device.
- Power line fuses.
- Auxiliary circuit fuses.
- Starting-up relays.
- Amperometric transformers.
- Capacitors (on request).
  DR 2000 electronic board with microprocessor.
- DR 2000 electronic board with microproces
   Terminals for capacitors connection.
- Terminals for float switches connection.
- Terminals for connection the RA 100E, RA 100A type remote alarm control panel or volt free contact module.
- Cable glands.

The panel is suitable for remote control of all the signals of the box.

#### **ON REQUEST:**

- Volt free contact module MSP 1M MSP 9M.
- RA 100 RA 100A control panel for remote alarm.

# QTLD 2 D Control panel for 2 submersible drainage pumps with three-phase motor, direct starting

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Code	Туре	Motor 400V - 3~	Setting	Dimensions
		kW	Α	HxBxP mm
	QTLD 2D 12A-FA	0,25 ÷ 5	1 ÷ 12 A	230x310x130

# Construction

Control panel with protection for 2 submersible drainage pumps with three-phase motors, with a 12A max. nominal current.

Operation managed by the DR 2000 electronic card 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 48 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 ~  $\pm$ 10% 50 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °Č. Protection IP 55.

# Components

- Box in thermoplastic material.
- Line selector switch with door-locking device.
- Power line fuses
- Auxiliary circuit fuses.
- Contactors.
- Amperometric transformers.
- DR 2000 type electronic board with microprocessor.
- Connection terminals for float switches.
   Terminals for connection the RA 100A type remote alarm control panel
- or volt free contact module.
- Cable glands.
- The panel is suitable for remote control of all the signals of the box.

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- Volt free contact module MSP 1M MSP 9M.
- RA 100A control panel for remote alarm.

# 🖃 calpeda

# QTLD 2 ST FT Electric control panel for 2 drainage pumps with three-phase motor, Y/A starting

675 -	Code	Туре	Motor Power <b>kW</b>	400V - 3~ Current <b>A</b>	Dimensions HxBxP mm
		QTLD 2ST 4 FT-RL	4	7 - 11	700x500x200
		QTLD 2ST 5,5 FT-RL	5,5	11 - 15	700x500x200
		QTLD 2ST 7,5 FT-RL	7,5	12 - 17	700x500x200
		QTLD 2ST 11 FT-RL	9,2 - 11	16 - 24	700x500x200
A CONTRACTOR		QTLD 2ST 15 FT-RL	15	23 - 31	700x500x200
		QTLD 2ST 18,5 FT-RL	18,5	30 - 39	700x500x200
		QTLD 2ST 22 FT-RL	22	35 - 43	900x600x250
A		QTLD 2ST 30B FT-RL	30	42 - 55	900x600x250
		QTLD 2ST 30A FT-RL	30	55 - 65	900x600x250
-		QTLD 2ST 37 FT-RL	37	61 - 84	1100x700x250
		QTLD 2ST 45 FT-RL	45	80 - 105	1100x700x250
ل <b>*</b>		QTLD 2ST 55 FT-RL	55	100 - 125	1200x800x300
-	7~7	QTLD 2ST 75 FT-RL	75	120 - 150	1200x800x300
		QTLD 2ST 92 FT-RL	92	155 - 255	1400x800x400

#### Construction

Control panel with protection for 2 submersible drainage pumps with three-phase motor,  $Y/\Delta$  starting.

Operation managed by the DR 2000 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 48 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 Hz (other voltages on request).
- Ambient temperature from -5 °C to +40 °C.
- Protection IP 55.

# - Metal case.

- Line selector switch with door-locking device.
- Power line fuses.
- Auxiliary circuit fuses. Contactors.
- Y/ $\Delta$  timers. Level regulator.
- DR 2000 type circuit board with microprocessor.
- 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.

- Volt free contact module MSP 1M MSP 9M.
- RA 100 RA 100A control panel for remote alarm.
- Voltmeter.
- Ammeter.

# 르 calpeda

# QTLD 3 D FT Control panel for 3 submersible drainage pumps with three-phase motor, direct starting





Code	Туре	Motor Power <b>kW</b>	Dimensions HxBxP mm			
		KVV	A			
	QTLD 3D 0,55 FT	0,55	1 - 1,6	470x390x170		
	QTLD 3D 1,1 FT	0,75 - 1,1	1,6 - 2,5	470x390x170		
	QTLD 3D 1,5 FT	1,5	2,5 - 4	470x390x170		
	QTLD 3D 3 FT	2,2 - 3	4 - 6,5	470x390x170		
	QTLD 3D 4 FT	4	6,3 - 10	470x390x170		
	QTLD 3D 5,5 FT	5,5	9 - 12	470x390x170		

# Construction

Control panel with protection for 3 submersible drainage pumps with threephase motor, direct starting.

- Operation managed by the DR 3000 electronic circuit board that has 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 48 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 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.
- Thermal relay
- DR 3000 type circuit board with microprocessor.
- Connection terminals for float switches.
- Connection terminals for the RA 100, RA 100A type remote alarm control panel or MSP 1M volt free contact module. - Cable glands.

#### **ON REQUEST:**

- Volt free contact module MSP 1M.
- RA 100 RA 100A control panel for remote alarm .
- Voltmeter.
- Ammeter.

# **QTLD 3 ST FT** Electric control panel for 3 **drainage** pumps with three-phase motor, $Y/\Delta$ starting



	Code	Туре		Motor 4 Power <b>kW</b>	400V - 3~ <i>Current</i> <b>A</b>	Dimensions HxBxP mm
		QTLD 3ST 4	FT-RL	4	7 - 11	800x600x250
		QTLD 3ST 5,5	FT-RL	5,5	11 - 15	800x600x250
		QTLD 3ST 7,5	FT-RL	7,5	12 - 17	800x600x250
		QTLD 3ST 11	FT-RL	9,2 - 11	16 - 24	800x600x250
		QTLD 3ST 15	FT-RL	15	23 - 31	800x600x250
		QTLD 3ST 18,5	FT-RL	18,5	30 - 39	1000x600x250
		QTLD 3ST 22	FT-RL	22	35 - 43	1100x700x250
		QTLD 3ST 30B		30	42 - 55	1200x800x300
		QTLD 3ST 30A	FT-RL	30	55 - 65	1200x800x300
		QTLD 3ST 37	FT-RL	37	61 - 84	1400x800x400
		QTLD 3ST 45	FT-RL	45	80 - 105	1400x800x400
		QTLD 3ST 55	FT-RL	55	100 - 125	1600x800x400
		QTLD 3ST 75	FT-RL	75	120 - 150	1600x1000x400
halla		QTLD 3ST 92	FT-RL	92	155 - 255	1600x1000x400

# Construction

Control panel with protection for 3 submersible drainage pumps with threephase motor,  $Y/\Delta$  starting.

Operation managed by the DR 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 48 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 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/A timers. Level regulator.
- DR 3000 type circuit board with microprocessor.
- Interface for DR 3000.
- Connection terminals for float switches.
- Connection terminals for thermal protectors.
- Connection terminals for water seepages probe.
   Connection terminals for the RA 100E, RA 100A type remote alarm control panel or MSP 1M volt free contact module. - Cable glands.

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- Volt free contact module MSP 1M.
- RA 100 RA 100A control panel for remote alarm .
- Voltmeter. - Ammeter.