

# Control and protection panels

## QM PT - Single-Phase direct starters

### CARATTERISTICHE

IP rating IP64

Ambient Temperature -5/+40 °C

N° 1 facility for wiring a pump controller (float switch, pressure switch, etc.), 1~230V

### MAIN COMPONENTS

Plastic panel

Unipolar thermal protector switch

Bipolar, illuminated switch



QM PT	Code	Approx. Power		A max	Dimensions mm
		hp	kW		
Single-phase 230 V 50 Hz					
QM PT 3	02069010	0,35 - 0,5	0,26 - 0,37	3	150 x 110 x 70
QM PT 5	02069020	0,5 - 0,75	0,37 - 0,55	5	
QM PT 7	02069030	0,9 - 1,1	0,65 - 0,8	7	
QM PT 10	02069040	1,3 - 1,6	0,95 - 1,2	10	

## QM IT - Single-Phase direct starters

### CHARACTERISTICS

IP rating IP40

Ambient Temperature -5/+40 °C

N° 1 facility for wiring a pump controller (float switch, pressure switch, etc.), 1~230V

### MAIN COMPONENTS

Plastic panel

Bipolar, illuminated thermal protector switch

### OPTIONS

Also available in IP55 rating



QM IT	Code	Approx. Power		A max	Dimensions mm
		hp	kW		
Single-phase 230 V 50 Hz					
QM IT 12	02070030	2	1,5	12	150 x 110 x 70
QM IT 18	02070035	3	2,2	18	

## QT MT - Three-phase Electromechanical direct starters

### CHARACTERISTICS

IP rating IP65

Ambient Temperature -5/+40 °C

N° 1 facility for wiring a pump controller (float switch, pressure switch, temperature sensor etc.)

N° 2 facilities for wiring stand and stop float switches

### MAIN COMPONENTS

Plastic panel

Bipolar, illuminated thermal protector switch

Run contactor

Low-voltage auxiliary circuits (24 V) with fuses

Lamp for pump running



QT MT	Code	Approx. Power		A min	A max	Dimensions mm
		hp	kW			
Three-phase 400 V 50 Hz						
QT MT 2,5	02081110	0,5 - 0,9	0,37 - 0,65	1,6	2,5	250 x 200 x 110
QT MT 4	02081120	1 - 1,6	0,75 - 1,2	2,5	4	
QT MT 6	02081130	2 - 3	1,5 - 2,2	4	6,3	
QT MT 10	02081140	4	3	6,3	10	

## QDC - Direct current Electromechanical direct starter

### CHARACTERISTICS

IP rating IP40

Ambient Temperature -5/+40 °C

N° 1 facility for wiring a pump controller (float switch, pressure switch, temperature sensor etc.)

### MAIN COMPONENTS

Plastic panel

Unipolar thermal protector switch

Power relay

Hand - off - auto selector switch

Lamp for pump running



QDC	Code	Approx. Power		A max	Dimensions mm
		hp	kW		
<b>24 V DC</b>					
QDC	02076100	0,5 - 0,75	0,37 - 0,55	30	190 x 140 x 70

## QM BT - Single-phase electronic starter with level control

### CHARACTERISTICS

IP rating IP40

Ambient Temperature -5/+40 °C

N° 1 facility for wiring a pump controller (float switch, pressure switch, temperature sensor etc.)

N° 3 facilities for wiring level probes (2 with switched timer) that can also be used with one or two float switches

### MAIN COMPONENTS

Plastic panel

Bipolar, illuminated thermal protector switch

Electronic level control

Led lights for: run - minimum level - cut-out

Low-voltage auxiliary circuits

### OPTIONS

Also available in IP55 rating



QM BT	Code	Approx. Power		A max	Dimensions mm
		hp	kW		
<b>Single-phase 230 V 50 Hz</b>					
QM BT 3	02075003	0,35 - 0,5	0,26 - 0,37	3	190 x 140 x 70
QM BT 5	02075010	0,5 - 0,75	0,37 - 0,55	5	
QM BT 7	02075015	0,9 - 1,1	0,65 - 0,8	7	
QM BT 10	02075020	1,3 - 1,6	0,95 - 1,2	10	
QM BT 12	02075025	2	1,5	12	

## QT CL - Three-phase electromechanical direct starters with level control

### CHARACTERISTICS

IP rating IP65

Ambient Temperature -5/+40 °C

N° 1 facility for wiring a pump controller (float switch, pressure switch, temperature sensor etc.)

N° 3 facilities for wiring level probes that can also be used with one or two float switches

### MAIN COMPONENTS

Plastic panel

Circuit breaker

Run contactor

Low-voltage auxiliary circuit (24 V) with fuses

Electronic level control

Led lights for power and run



QT CL	Code	Approx. Power		A min	A max	Dimensions mm
		hp	kW			
<b>Three-phase 400 V 50 Hz</b>						
QT 2,5 CL	02081111	0,5 - 0,9	0,37 - 0,65	1,6	2,5	250 x 200 x 110
QT 4 CL	02081121	1 - 1,6	0,75 - 1,2	2,5	4	
QT 6 CL	02081131	2 - 3	1,5 - 2,2	4	6,3	
QT 10 CL	02081141	4	3	6,3	10	

# Control and protection panels

## AM - AT - Direct-on line starters for single and three-phase pumps with level control

### CHARACTERISTICS

IP rating IP55

Ambient Temperature -5/+40 °C

N° 1 facility for wiring a pump controller (float switch, pressure switch, temperature sensor etc.)

N° 3 facilities for wiring level probes that can also be used with one or two float switches

### MAIN COMPONENTS

Plastic panel

Opening interlocked

Run contactor

Low-voltage auxiliary circuit (24 V) with fuses

Thermal relay for motor protection

Set of fuses for motor protection

Electronic level control by means of a microprocessor

Hand - off - auto selector switch

Led lights for power and motor running, thermal cut-out and level cut-out



AM-AT-CL	Code	Approx. Power		A min	A max	Dimensions mm
		hp	kW			
<b>Single-phase 230 V 50 Hz</b>						
AM 20 CL	02080025	2	1,5	9	13	220 x 300 x 120
AM 30 CL	02080030	3	2,2	12	18	
<b>Three-phase 400 V 50 Hz</b>						
AT 55 CL	02081030	5,5	4	9	13	220 x 300 x 120
AT 75 CL	02081035	7,5	5,5	12	18	
AT 125 CL	02081040	10 - 12,5	7,5 - 9,2	17	25	
AT 150 CL	02081045	15	11	22	32	

## P2 BPA2 - P2 BPTA2 - Direct on line electromechanical single/three-phase starters for 2 electric pumps

### CHARACTERISTICS

IP rating IP55

Ambient Temperature -5/+40 °C

N° 3 facilities for wiring a start - stop alternate-duty-assist device (float switch, pressure switch, etc.)

N° 1 facility for maximum level alarm device

N° 1 Volt-free facility for alarm device

### MAIN COMPONENTS

Plastic panel

Opening interlocked

Low-voltage auxiliary circuit (24 V) with fuses

Run contactors

Thermal relays to protect the motors (in case of intervention, the stand-by pump is immediately turned ON)

Set of fuses for motor

Electronic circuit with microprocessor to control the alternate or simultaneous run of the electric pumps

Hand - off - auto selector switch

Led lights for: run P1 and P2 - thermal cut-out P1 and P2

### ACCESSORIES

Power failure alarm



P2 BPA2 - P2 BPTA2	Code	Approx. Power		A min	A max	Dimensions mm
		hp	kW			
<b>Single-phase 230 V 50 Hz</b>						
P2 BPA2 4	ZP2BPA2/1	0,5	0,37	2,5	4	300 x 380 x 120
P2 BPA2 6		0,75 - 1	0,55 - 0,75	4	6,3	
P2 BPA2 10		1,5	1,1	7	10	
P2 BPA2 13		2	1,5	9	13	
<b>Three-phase 400 V 50 Hz</b>						
P2 BPTA2 2	ZP2BPTA2/1	0,5	0,37	1,2	1,9	300 X 380 X 120
P2 BPTA2 2,5		0,75	0,55	1,6	2,5	
P2 BPTA2 4		1 - 1,5	0,75 - 1,1	2,5	4	
P2 BPTA2 6		2 - 3	1,5 - 2,2	4	6,3	
P2 BPTA2 10		4,5	3,4	7	10	

## ATI - Three-phase Inverter starters

### CHARACTERISTICS

IP rating IP40

Ambient Temperature -5/+40 °C

N° 2 facilities for wiring a pump controller (float switch, pressure switch, temperature sensor etc.)

N° 2 facilities for wiring start - stop float switches

N° 1 facility for wiring a pressure transducer 4÷20 mA 0÷10 bar

### MAIN COMPONENTS

Steel-sheet control panel

Opening interlocked

Low-voltage auxiliary circuits (24V) with fuses

Inverter with display, setting keyboard and internal fan

Set of fuses to protect the inverter

Hand - off - auto selector switches.

In Hand: using constant frequency (50 Hz) via pressure switch, float switch, etc.

In Auto: using variable frequency (30÷50 Hz) via pressure transducer 4÷20 mA 0÷10 bar

Lamps for: power - run - alarm - level cut-out

### OPTIONS

Version with level control

### ACCESSORIES

Pressure trasducer



ATI	Code	Approx. Power		A max	Dimensions mm
		hp	kW		
<b>Single-Phase line 230 V 50 Hz - Three-phase motor 230 V 50 Hz</b>					
ATI 230 10	02077010	1	0,75	4,2	300 x 400 x 200
ATI 230 20	02077020	1 - 2	0,75 - 1,5	6,8	
ATI 230 30	02077030	2 - 3	1,5 - 2,2	9,6	400 x 600 x 250
<b>Three-phase line 400 V 50 Hz - Three-phase motor 400 V 50 Hz</b>					
ATI 400 10	02078010	1	0,75	2,2	300 x 400 x 200
ATI 400 20	02078020	1 - 2	0,75 - 1,5	3,7	
ATI 400 30	02078030	2 - 3	1,5 - 2,2	5,3	
ATI 400 40	02078040	3 - 4	2,2	7,2	400 x 600 x 250
ATI 400 55	02078050	4 - 5,5	3 - 4	9	
ATI 400 75	02078060	5,5 - 7,5	4 - 5,5	12	
ATI 400 100	02078070	7,5 - 10	5,5 - 7,5	15,5	

## ATRS - Three-phase soft starters

### CHARACTERISTICS

IP rating IP55

Ambient Temperature -5/+40 °C

N° 1 facility for wiring a pump controller (float switch, pressure switch, temperature sensor etc.)

N° 2 facilities for wiring start - stop float switches

### MAIN COMPONENTS

Steel-sheet control panel

Opening interlocked

Low-voltage auxiliary circuits (24V) with fuses

Set of fuses to protect the motor

Hand - off - auto selector switch

Lamps for: power - run - thermal cut-out - level cut-out

### OPTIONS

Version with level control



ATRS	Code	Approx. Power		A min	A max	Dimensions mm
		hp	kW			
<b>Three-phase 400 V 50 Hz</b>						
ATRS 10	02079010	7,5 - 12,5	5,5 - 9,2	12	25	300 x 400 x 200
ATRS 15	02079015	15	11	14	32	
ATRS 20	02079020	20	15	18	37	400 x 600 x 250
ATRS 25	02079030	25	18,5	23	45	
ATRS 35	02079050	30 - 35	22 - 26	30	60	
ATRS 40	02079060	40	30	37,5	75	500 x 700 x 250
ATRS 50	02079070	50	37	42,5	85	
ATRS 60	02079080	60	45	60	115	600 x 800 x 300
ATRS 75	02079090	75	55	70	142	

# Control and protection panels

## ATS - Direct-on-line electromechanical three-phase starters for electric pumps Semisom/80

### CHARACTERISTICS

IP rating IP55
Ambient Temperature -5/+40 °C
N° 1 facility for wiring the humidity probe of the first chamber
N° 1 facility for wiring the temperature sensor
N° 1 facility for wiring a pump controller (float switch, pressure switch, temperature sensor etc.)
N° 2 facilities for wiring start – stop float switches
N° 1 facility for maximum level float switch
N° 1 facility for 24 V AC alarm device

### MAIN COMPONENTS

Steel-sheet control panel
Opening interlocked
Low-voltage (24 V) auxiliary circuits with fuses
Run contactor
Thermal relay for motor protection
Relay to control motor overheating
Set of fuses to protect the motor
Electronic control in case of humidity in the first chamber
Hand - off - auto selector switch
Lamps for: power - run - thermal cut-out - cut-out for motor overheating - cut-out for humidity in the first chamber - maximum level cut-out



ATS	Code	Approx. Power		A min	A max	Dimensions mm
		hp	kW			
<b>Three-phase 400 V 50 Hz</b>						
ATS 55	02082010	3,5 - 5,5	2,6 - 4	7	10	300 x 400 x 150
ATS 100	02082020	7,5 - 10	5,5 - 7,5	12	18	
ATS 110	02082030	11	8	17	25	

## AT2S - Direct-on-line electromechanical three-phase starters for 2 electric pumps Semisom/80

### CHARACTERISTICS

IP rating IP55
Ambient Temperature -5/+40 °C
N° 2 facilities to wire the humidity probes of the first chamber
N° 2 facilities for wiring the temperature sensors
N° 3 facilities for wiring a start - stop alternate-duty-assist device (float switch, pressure switch, etc.)
N° 1 facility for maximum level alarm device
N° 1 Volt-free facility for alarm device

### MAIN COMPONENTS

Steel-sheet control panel
Opening interlocked
Low-voltage (24 V) auxiliary circuits with fuses
Run contactors
Thermal relays for motor protection
Relays to control motor overheating
Set of fuses to protect the motor
Electronic control in case of humidity in the first chambers
Hand - off - auto selector switches
Electronic circuit with microprocessor to control the alternate or simultaneous run of the electric pumps
Lamps for: power - pump 1 - pump 2 - thermal cut-out - cut-out for motor overheating - cut our for humidity in the first chamber



### ACCESSORIES

Power failure alarm

AT2S	Code	Approx. Power		A min	A max	Dimensions mm
		hp	kW			
<b>Three-phase 400 V 50 Hz</b>						
AT2S 55	02082110	3,5 - 5,5	2,6 - 4	7	10	400 x 600 x 200
AT2S 100	02082120	7,5 - 10	5,5 - 7,5	12	18	
AT2S 110	02082130	11	8	17	25	

## QA 12 - Power failure alarm

### CHARACTERISTICS

IP rating IP40

Ambient Temperature -5/+40 °C

N° 1 facility for Volt-free alarm device

12 hour-life battery

### MAIN COMPONENTS

Plastic panel

On - off - test selector switch

102 db/1m acoustic alarm

Led visual alarm

230 V battery charger supplied with 6 V nickel cadmium battery



QA 12	Code	Dimensions
		mm
QA 12	02064030	190 x 140 x 70