

Power Control Panels Standard Range

ADDITIONAL EQUIPMENT

CETAL power control panels are designed for industrial heating applications. We have developed a turn-key standard range.



CE

Advantages

- Power control panels designed for industrial applications
- Quick and safe installation and start-up
- High-quality components (**Eurotherm** and **Schneider Electric**)
- Safety power contactor separated from the temperature control loop
- Optimized frame size for space saving
- Faster engineering time



CETAL, industrial heating system designer and manufacturer, offers you a range of turn-key power control panels optimized for your process.

Which control mode to choose ?

For processes with high thermal inertia (for example, heating of large tanks of water or oil), a power control panel with On/Off control mode (TOR) with **contactor** (ARS or ARC models) is recommended.

PID (Proportional, Integral, and Derivative) controls are better suited:

- if the process consists in fast heating of liquid or gas (such as circulation heaters)
- if a quick reaction time with temperature control accuracy is required
- and/if a variable flowrate is needed

With power control through thyristor (ART model).

For use in

- Technical area
- Non-ATEX environment

Components

The power control panels are equipped with high-quality components (**Eurotherm** and **Schneider Electric**).

Inside the power control panel

- Main load break switch with external handle (lockable)
- Fuse disconnect switch + fuses
- 1 x safety power contactor
- External safety loop on terminals (ARC and ART models)

On front side

- On/Off illuminated green switch (ART model)
- White lamp (voltage on)
- Red lamp (global default)
- Reset pushbutton (ART model)
- Emergency stop pushbutton

Technical data

- IP54 steel box
- Epoxy polyester surface, textured appearance 60 µm, colour Grey (RAL7035)
- 3-phase 400 V + earth (without neutral point)
- Safety transformer
- Power and dimensions see page 3
- Line safety contactor separated from temperature control loop
- The PID controllers and electronic thermostats are equipped with a factory-set measurement input which can be reconfigured by the user:
 - PT100 range from -200 to +200°C
 - TC J, range from 0 to +450°C
 - TC K, range from 0 to +1200°C
- Wall stand included
- Heating element connection through to terminal block, cable glands included
- Possibility to install remote emergency stop and On/Off switches
- Available information on any potential free terminal:
 - On/Off status
 - Global Default
 - Emergency stop

All our power control panels comply with IEC-EN-61639 / IEC-EN-60364 / IEC-EN 60204 standards and 2014/35/UE, CE directive (low voltage).

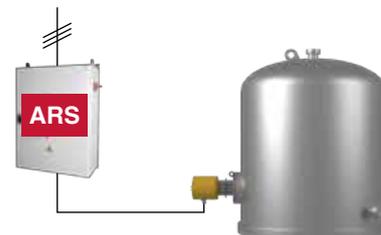
Life Is On

Eurotherm.
by Schneider Electric

Technical Data

Mechanical contactor associated with electromechanical thermostat (On/Off) and/or external overtemperature controller

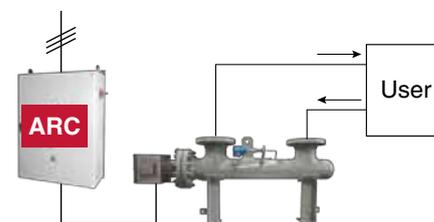
Reference	Max. rated power (KW)	Dimensions (mm)			Weight (Kg)
		Height	Width	Depth	
ARS 004	3.5	400	300	200	10
ARS 008	8.00	400	300	200	10
ARS 013	13.00	400	300	200	12
ARS 023	23.00	500	300	200	18
ARS 035	35.00	600	500	250	35
ARS 047	47.00	600	500	250	40
ARS 064	64.00	600	500	250	45
ARS 085	85.00	800	600	250	50



Tank, storage
Example: Hot-water tank

Mechanical power contactor associated with self-tuning PID controller

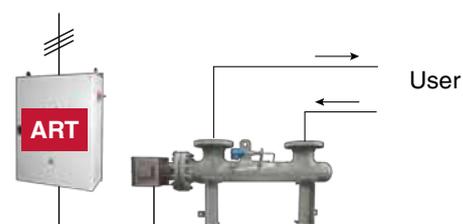
Reference	Max. rated power (KW)	Dimensions (mm)			Weight (Kg)
		Height	Width	Depth	
ARC 004	3.5	600	500	200	25
ARC 008	8.00	600	500	200	35
ARC 013	13.00	600	500	200	35
ARC 023	23.00	600	500	200	38
ARC 035	35.00	600	500	250	38
ARC 047	47.00	600	500	250	42
ARC 064	64.00	600	500	250	55
ARC 085	85.00	800	600	250	55



Application with high inertia
(closed loop)
Example: Water or thermal fluid heating

Static contactor (Thyristor) associated with self-tuning PID controller

Reference	Max. rated power (KW)	Dimensions (mm)			Weight (Kg)
		Height	Width	Depth	
ART 004	3.5	600	500	200	25
ART 008	8.00	600	500	200	35
ART 013	13.00	600	500	250	35
ART 023	23.00	600	500	250	38
ART 035	35.00	600	600	300	38
ART 047	47.00	600	600	300	42
ART 064	64.00	1000	600	300	75
ART 085	85.00	1000	600	400	90



Application with low inertia
(open loop)
Example: Gas circulation heater or sensitive fluid heating

Options

For all models

- Projecting roof **or** eyelet for handling

For ARC and ART model

- External safety loop on terminals
- Electronic thermostat security controller
- 2-wire RS485 com link on PID controller

For power control panels connected to ATEX heaters: 30 mA circuit breaker



Enquiry form

1 Type of power control panel

- ARS Mechanical power contactor
- ARC PID controller + mechanical power contactor
- ART PID controller + static contactor

2 Rated power

- 004 3.50 KW
- 008 8.00 KW
- 013 13.00 KW
- 023 23.00 KW
- 035 35.00 KW
- 047 47.00 KW
- 064 64.00 KW
- 085 85.00 KW

3 Type of electrical protection

- F Fuses
- D Circuit breaker (for power control panels connected to ATEX heaters)

4 Type of sensor on PID controller

- X Without
- 1 TC K sensor
- 2 TC J sensor
- 3 PT100 sensor

5 RS485 com link

- X Without
- Y With

6 Electronic safety switch

- X Without
- 1T 1 safety switch
- 2T 2 safety switches
- 3T 3 safety switches

7 Type of sensor on the safety switch

- X Without
- 1 TC K sensor
- 2 TC J sensor
- 3 PT100 sensor

8 Documentation language

- ENG English
- FRA French
- GER German
- ITA Italian
- SPA Spanish

Option 1: Accessories

- X Without
- A Projecting roof
- J Eyelets for handling

Option 2: Factory set-up

- X No
- Y Yes

1	2	3	4	5	6	7	8
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Please send us the code obtained by selecting the corresponding fields

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