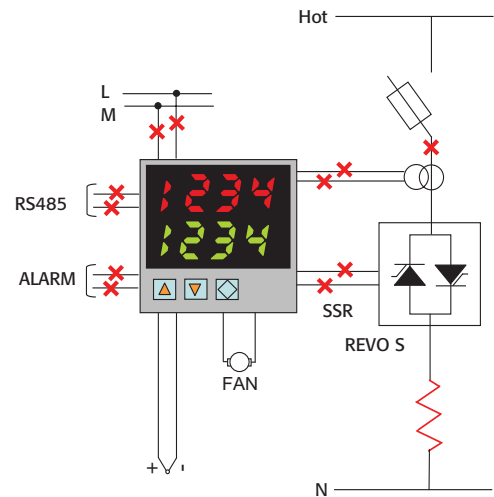




# REVO-TC 1PH Temperature + Thyristor



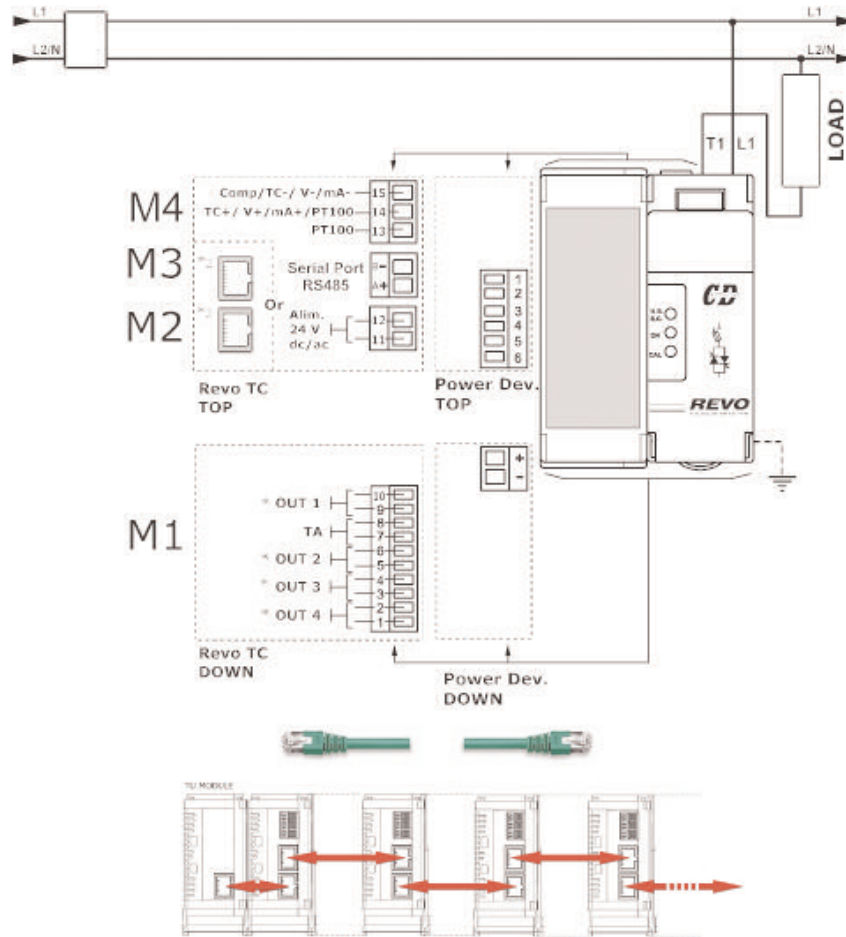
## GENERAL DESCRIPTION

- Integrate Fuse + Fuse Holder with built in Current Transformer
- Current Transformer integrated when HB option is selected on Controller
- Input signal SSR standard, analogue is an option
- Zero crossing firing
- Electronic fully isolated from power with constant current drain on input
- Special heat Sink with very high dissipation value
- Operating temperature 40° C without derating
- Comply with EMC
- DIN RAIL side by side mounting
- IP20 protection

## TECHNICAL SPECIFICATION TEMPERATURE CONTROLLER

- PID Temperature controller
- Automatic Tuning of PID parameters with Self Tune or Pretune procedure
- Manual setting when requested of PID parameters
- Three pallets of PID parameters can be enabled at programmed PV value
- Dual Display to read PV, Set Point Load current and all parameters
- Universal input for Thermocouple RTD and linear input
- Four configurable outputs as Relay, SSR and 4:20mA
- Heating and Cooling controller with possibility to select the type of cooling for fan, water and oil
- RS485 communication from 19200 to 57600 Bauds Modbus RTU protocol
- The controller can be configured from front push button or via RS485 comm. or via USB port on front controller using CD Automation programming cable
- Auto/Manual with Bumpless Transfer facility
- Heater Break Alarm to diagnostic partial or total load failure
- RS485 port RTU Modbus Protocol
- Comply with CE-EMC
- Screw terminals as standard or RJ45 Connector
- DIN rail mounting
- Dimensions Width: 36 Height: 121 Depth: 86
- Flat cable and connectors for multiple controller system

## WIRING CONNECTION REVO-TC 1PH from 30A to 40A

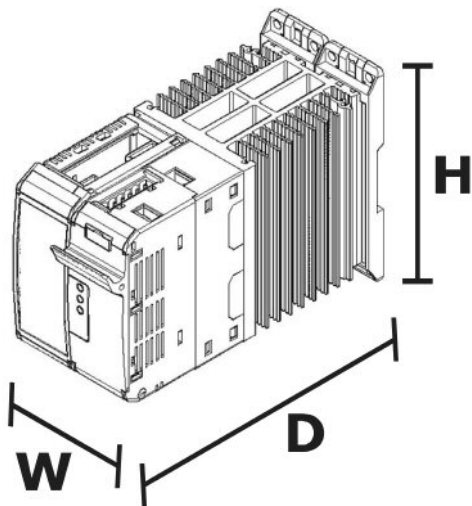


- See Out terminal chapter for more informations on manuals
- 2 Only with flat wiring system Option: connect with proper cable (RJ45 Cat 5E Patch Cable UTP) as shown:

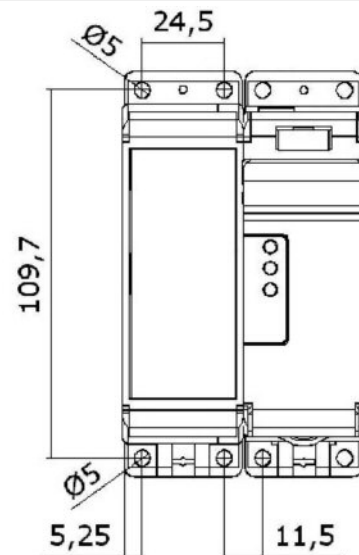
### NOTE

- A suitable device must ensure that the unit can be electrically isolated from the supply, this allows the qualified people to work in safety.
- The user installation must be protecting by electromagnetic circuit breaker or by fuse isolator. The semiconductor fuses are classified for UL as supplementar protection for semiconductor.
- The heat-sink must be connected to the earth.
- Only for the HB option
- Only for the Analog Input option.
- Use the extrarapid fuse with low I<sup>t</sup>.

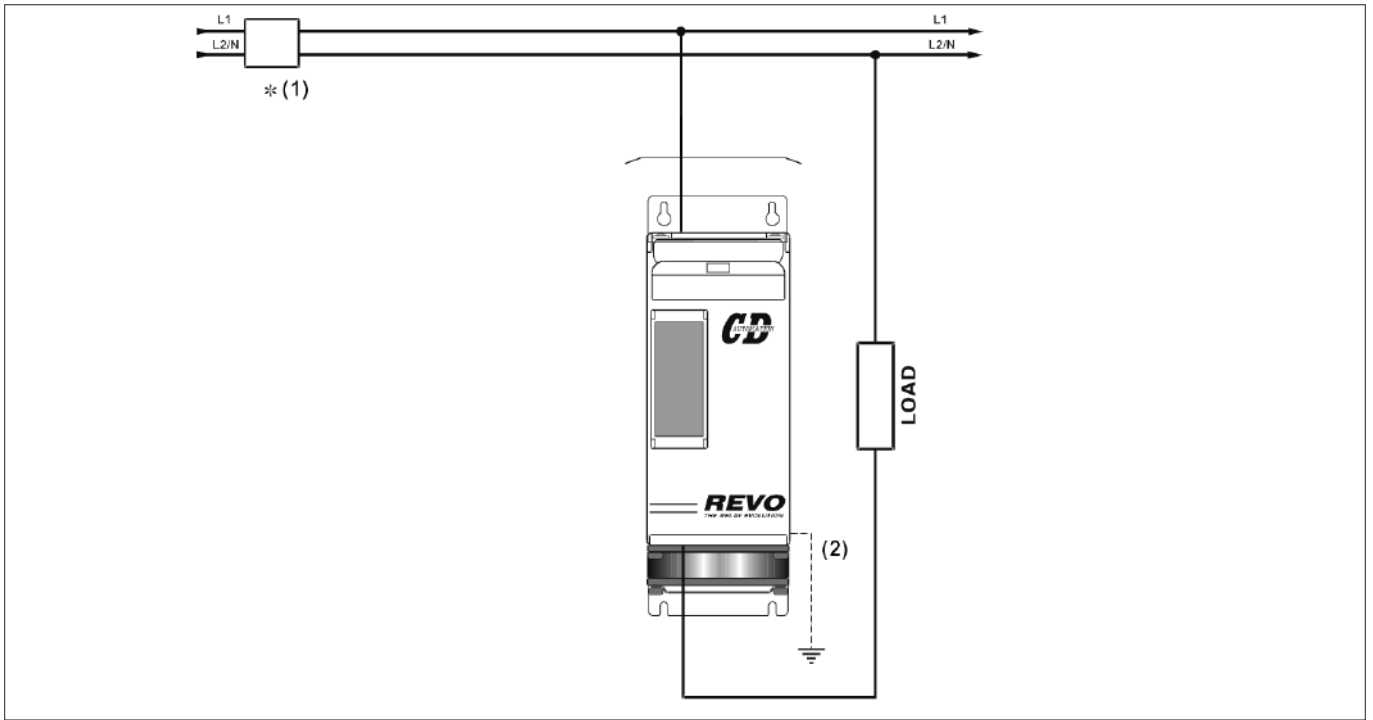
## DIMENSION AND FIXING HOLES



W 72 mm. - H 121 mm. - D 185 mm. - kg. 1,15



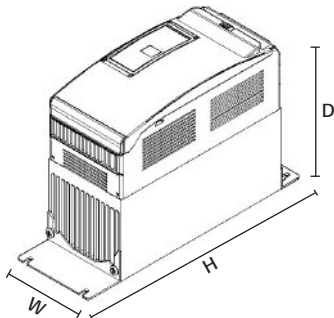
## WIRING CONNECTION REVO-TC 1PH from 60A to 210A



### NOTE

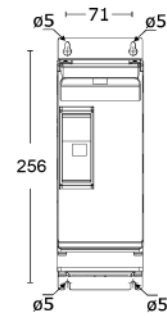
- (1) • A suitable device must ensure that the unit can be electrically isolated from the supply, this allows the qualified people to work in safety.
- The user installation must be protecting by electromagnetic circuit breaker or by fuse isolator. The semiconductor fuses are classified for UL as supplementer protection for semiconductor.
- (2) • The heat-sink must be connected to the earth.

## DIMENSION AND FIXING HOLES

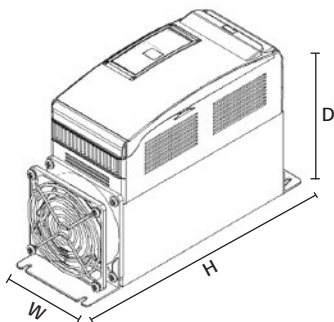


SR12 W 93 mm. - H 269 mm. - D 170 mm. - kg. 3,4

**REVO-TC 1PH 60A - 90A** (Without Fan)

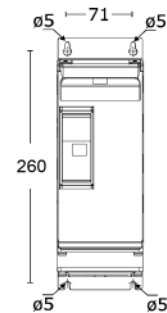


**REVO-TC 1PH 60A - 90A** (Without Fan)



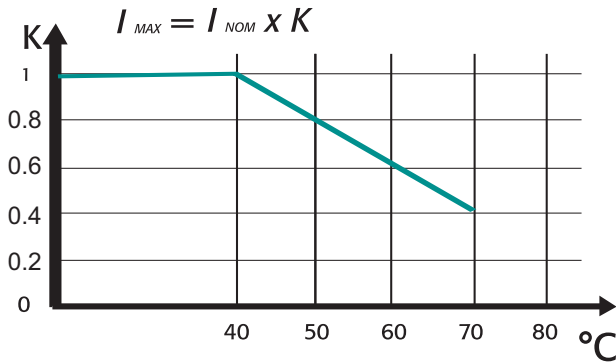
SR15 W 93 mm. - H 273 mm. - D 170 mm. - kg. 3,6

**REVO-TC 1PH 120A÷210A** (With Fan)



**REVO-TC 1PH 120A÷210A** (With Fan)

## DERATING CURVES



REVO TC-TC has been sized for operating temperature of 40° C  
Over this temperature use the graphic above

## OUTPUT FEATURES (POWER DEVICE)

Current A	Voltage range (V)	Ripetitive peak reverse voltage (480V) (600V)	Latching current (mAeff)	Max peak one cycle (10msec.)	Leakage current (mAeff)	I2T value for fusing tp=10msec.	Frequency range (Hz)	Power loss I=inom (W)	Isolation Voltage Vac	
30A	24÷600V	1200	1600	250	400	15	780	47÷70	38	2500
35A	24÷600V	1200	1600	250	600	15	1750	47÷70	44	2500
40A	24÷600V	1200	1600	250	800	15	3110	47÷70	50	2500
60A	24÷600V	1200	1600	450	1000	15	4750	47÷70	65	2500
90A	24÷600V	1200	1600	450	2000	15	19100	47÷70	84	2500
120A	24÷600V	1200	1600	450	1540	15	11300	47÷70	138	2500
150A	24÷600V	1200	1600	450	2000	15	19100	47÷70	162	2500
180A	24÷600V	1200	1600	300	4800	15	108000	47÷70	178	2500
210A	24÷600V	1200	1600	300	5250	15	128000	47÷70	202	2500

## ORDERING CODES REVO-TC 1PH

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
<b>REVO TC 1PH</b>	R	T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>3</b> Phase Controlled	Description code		Numeric code														
	1 PHASE UNIT 1PH		1														
<b>4,5,6</b> Phase Current 1PH/2PH/3PH	Description code		Numeric code														
	30A		0 3 0 (3)														
	35A		0 3 5														
	40A		0 4 0														
	60A		0 6 0														
	90A		0 9 0														
	120A		1 2 0														
	150A		1 5 0														
	180A		1 8 0														
	210A		2 1 0 (2)														
<b>7</b> Max Voltage	Description code		Numeric code														
	480V		4														
	600V		6														
<b>8</b> Aux. Voltage supply	Description code		Numeric code														
	12:24V ac dc		4														
<b>9</b> Input	Description code		Numeric code														
	Thermocouple		T														
	Pt 100		N														
	0:10V dc		V														
	4:20mA		A														
<b>10</b> Output 2	Description code		Numeric code														
	Relay Output 2		R														
	Heating Only		0														
<b>11</b> Output 3	Description code		Numeric code														
	1 off D/I 24v d.c.		1														
	1 off D/O Relay contact		2														
<b>12</b> Fuse & Option	Description code		Numeric code														
	For All Units =< 40A Fuse & Fuse Holder		F														
	Fuse & Fuse Holder + CT		Y														
	Fuse & Fuse Holder +CT +HB with screw terminals		H														
	Fuse & Fuse Holder +CT +HB with Flat Cable		X														
	For All Units > 40A Fixed Fuses Standard		F														
	Fixed Fuse Standard + CT		Y														
	Fixed Fuse Standard + CT + HB		H														
<b>13</b> Fan Option	Description code		Numeric code														
	No fan for unit =< 90A		0														
	Fan 110V for unit > 90A		1														
	Fan 220V for unit > 90A		2														
<b>14</b> Approvals	Description code		Numeric code														
	CE EMC For European Market		0														
	cUL pending up to 210A		L														
<b>15</b> Manual	Description code		Numeric code														
	None		0														
	Italian Manual		1														
	English Manual		2														
	German Manual		3														
	French Manual		4														
<b>16</b> Version	Description code		Numeric code														
	Standard unit with a single fuse		1														
	Unit with 2 Fuses + Fuse Holder ,=<40A (Just on single phase units)		2 (4)														

### LEGEND

CT = Current Transformer  
HB = Heater Break Alarm

Note (1): Fixed fuses over 40A

Note (2): The temperature controller can be mounted as an option on all CD automation Thyristor unit

Note (3): Available on 2 - 3PH only

Note (4): Available on RT1 only

