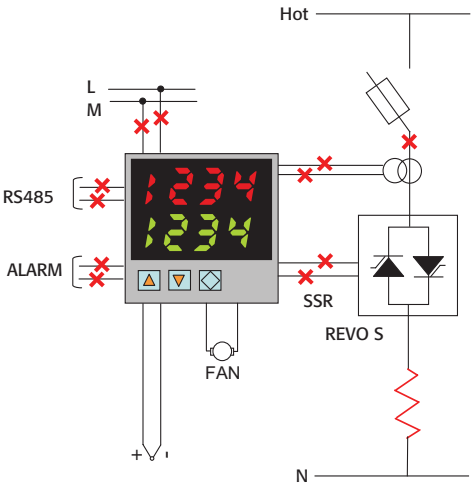
REVO-TC 3PH Temperature + Thyristor



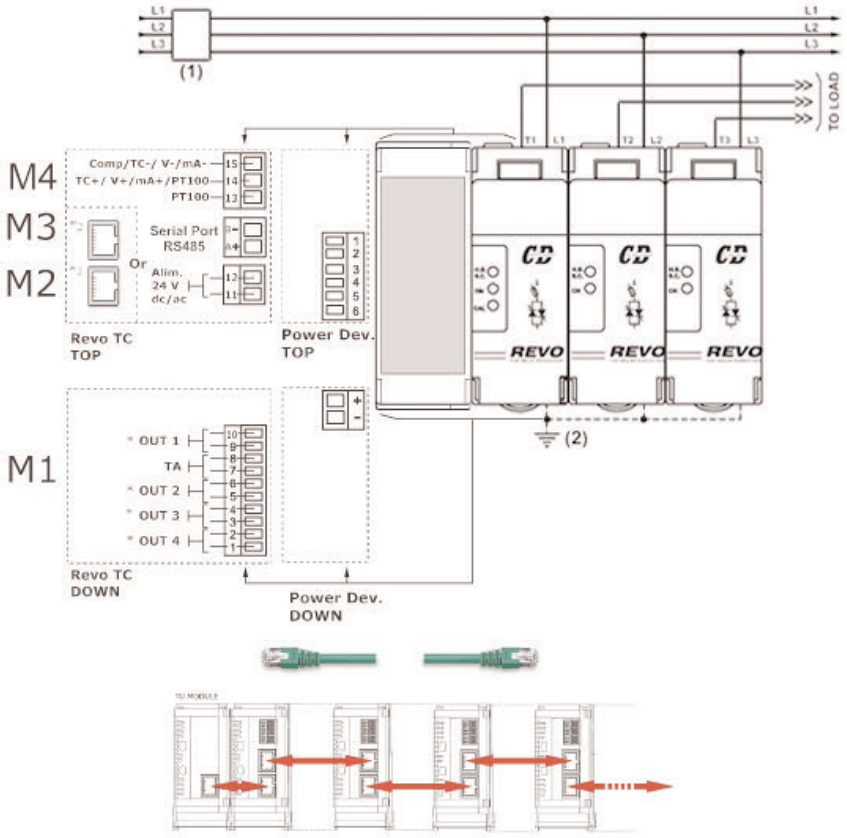
GENERAL DESCRIPTION

- Integrate Fuse + Fuse Holder with built in Current Transformer
- Current Transformer integrated when HB option is selected on Controller
- Universal Input
- Zero crossing firing
- 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

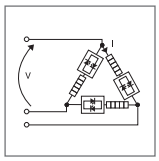
- PID Temperature controller
- Automatic Tuning of PID parameters with Self Tune or Pretune procedure
- Manual setting when requested of PID parameters
- Three pallets of PID parameters can be enabled at programmed PV value
- Dual Display to read PV,Set Point ,Load current and all parameters
- Universal 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
- Heather Break Alarm to diagnostic partial or total load failure
- RS485 port RTU Modbus Protocol
- Comply with CE-EMC
- Screw terminals as standard
- DIN rail mounting
- Dimensions Width: 36 Height: 121 Depth: 86
- Flat cable and connectors for multiple controller system

WIRING CONNECTION REVO-TC 3PH from 30A to 40A



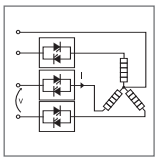
- See Out terminal chapter for more informations on manuals
- 2 Only with flat wiring system Option: connect with proper cable (RJ45 Cat 5E Patch Cable UTP) as shown:

LOAD TYPE



OPEN DELTA
Resistive or
Infrared Lamps
Long and
medium waves

LOAD TYPE



STAR with neutral
Resistive or
Infrared Lamps
Long and
medium waves

NOTE

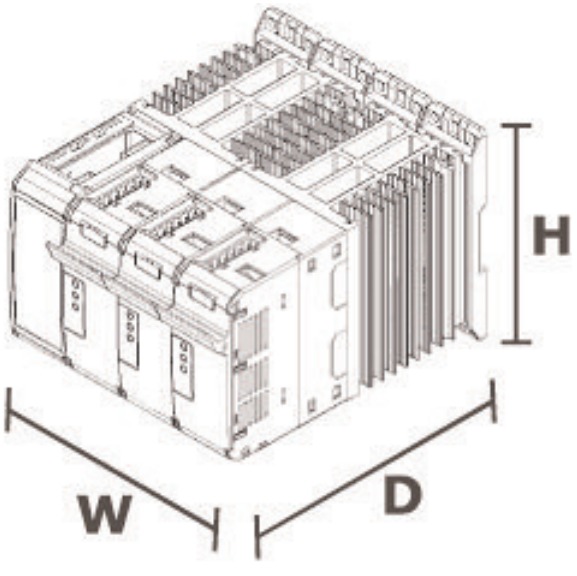
(1) • A suitable device must ensure that the unit can be electrically isolated from the supply, this allows the qualified people to work in safety.

• The user installation must be protecting by electromagnetic circuit breaker or by fuse isolator. The semiconductor fuses are classified for UL as supplementar protection for semiconductor.

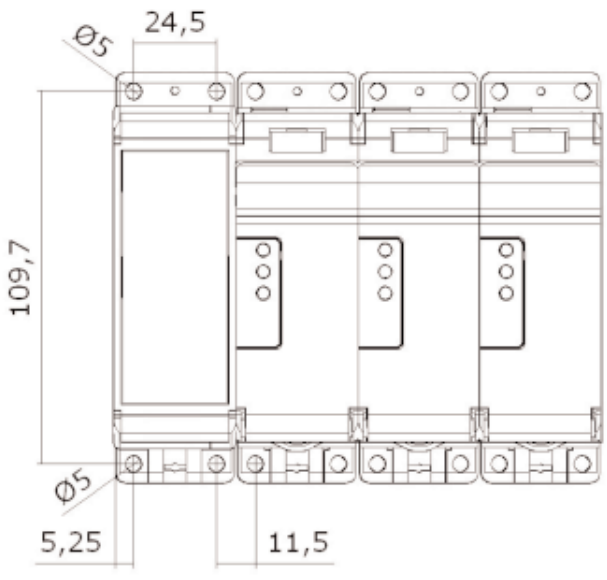
(2) • The heat-sink must be connected to the earth.

(3) • Only for the HB option

DIMENSION AND FIXING HOLES

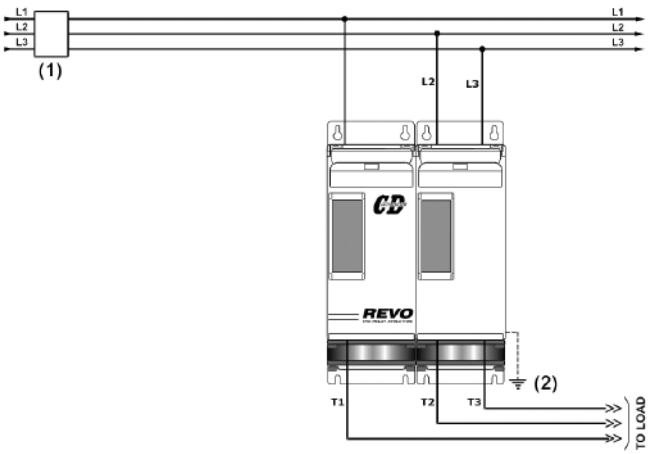


W 144 mm. - H 121 mm. - D 185 mm. - kg. 2,4

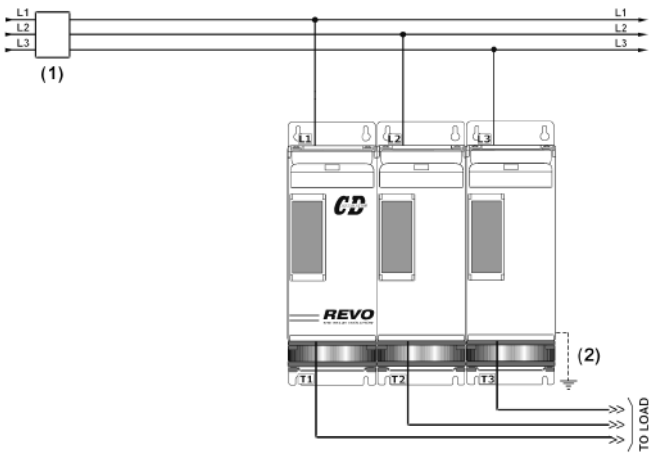


WIRING CONNECTION REVO-TC 3PH from 60A to 210A

REVO-TC 3PH from 60 to 90A



REVO-TC 3PH from 120 to 210A



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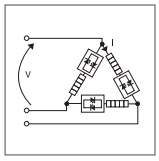
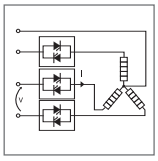


OPEN DELTA
Resistive or
Infrared Lamps
Long and
medium waves

LOAD TYPE



STAR with neutral
Resistive or
Infrared Lamps
Long and
medium waves

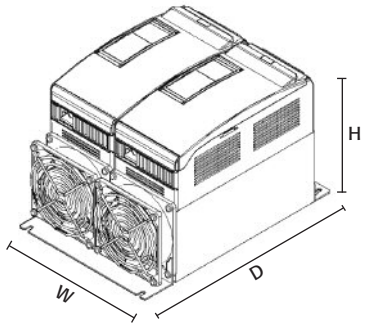
NOTE

(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 supplementar protection for semiconductor.

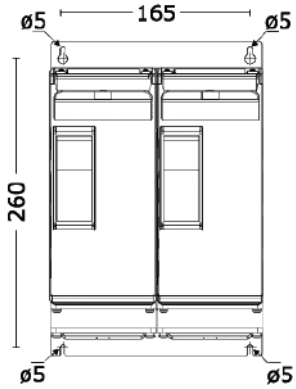
(2) • The heat-sink must be connected to the earth.

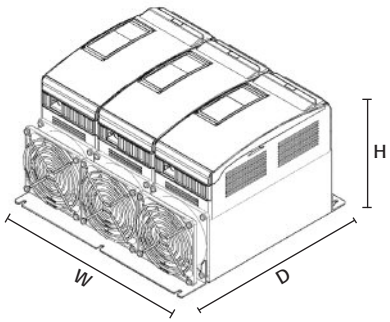
DIMENSION AND FIXING HOLES



SR16 W 186 mm. - H 273 mm. - D 170 mm. - kg. 7

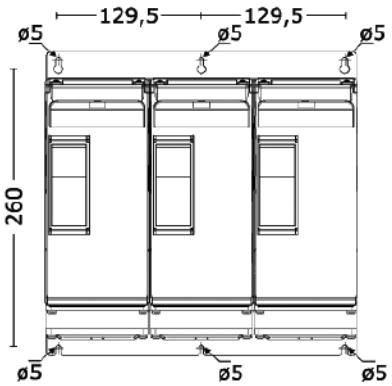
60A - 90A



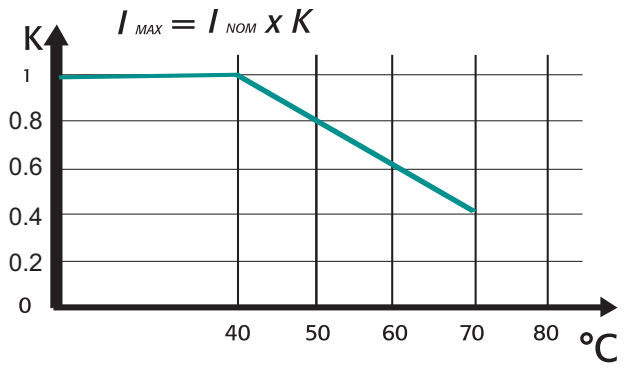


SR17 W 279 mm. - H 273 mm. - D 170 mm. - kg. 10

120A÷210A



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
60A	24÷600V	1200	1600	450	1000	15	4750	47÷70	195	2500
90A	24÷600V	1200	1600	450	2000	15	19100	47÷70	251	2500
120A	24÷600V	1200	1600	450	1540	15	11300	47÷70	414	2500
150A	24÷600V	1200	1600	450	2000	15	19100	47÷70	486	2500
180A	24÷600V	1200	1600	300	4800	15	108000	47÷70	534	2500
210A	24÷600V	1200	1600	300	5250	15	128000	47÷70	606	2500

FAN SPECIFICATION

Supply: 230V Standard	Input Power 16W
Supply: 115V Option	Input Power 14W

ORDERING CODES REVO-TC 3PH

	1	2	3	4	5	6		7	8	9	10	11	12	13	14	15	16
REVO TC 3PH	R	T	3	_	_	_	-	_	_	_	_	_	_	_	_	_	_

3 Phase Controlled

Description code	Numeric code
1 PHASE UNIT 3PH	3

4,5,6 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)

7 Max Voltage

Description code	Numeric code
480V	4
600V	6

8 Aux. Voltage supply

Description code	Numeric code
12:24V ac dc	4

9 Input

Description code	Numeric code
Thermocouple	T
Pt 100	N
0:10V dc	V
4:20mA	A

10 Output 2

Description code	Numeric code
Relay Output 2	R
Heating Only	0

11 Output 3

Description code	Numeric code
1 off D/I 24v d.c.	1
1 off D/O Relay contact	2

12 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

13 Fan Option

Description code	Numeric code
No fan for unit =< 90A	0
Fan 110V for unit > 90A	1
Fan 220V for unit > 90A	2

14 Approvals

Description code	Numeric code
CE EMC For European Market	0
cUL pending up to 210A	L

15 Manual

Description code	Numeric code
None	0
Italian Manual	1
English Manual	2
German Manual	3
French Manual	4

16 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