



- » Three-Phase Solid State Voltage Regulator
- » 3 control ranges: 0 - 10 Vdc, 4 - 20 mA and potentiometer
- » Maximum current according to model: 10, 25, 40, 60, 80, 100A.
- » Operating range: 20 - 400 VAC.
- » Frequency range: 50 - 60 Hz.
- » Maximum non-repetitive peak voltage: 600 Vp.
- » IP pollution (IP 20).

References

Control Voltage	Operational Voltage	Nominal Current	Reference	Heat sink Reference
0 - 10 Vdc 4 - 20 mA	400 VAC	10 A	FCR-400-10R	H71/110M
		25 A	FCR-400-25R	H31/110M
		40 A	FCR-400-40R	H31/150M
		60 A	FCR-400-60R	H31/110-F
		80 A	FCR-400-80R	H31/150-F

General specifications

Dielectric isolation between input and output	2.500 VAC
Operating temperature	-20 °C a 65 °C
Storage temperature	-45 °C a 85 °C
Thermal resistance between joint and housing	2.5° C/W(25A)
	0.5° C/W(80A)
	1.25° C/W(40A)
	0.3° C/W(100A)
Operating environmental humidity up to CE Marking	0.65° C/W(60A)
	85% Yes

Input specifications

	Input VDC	Current
Control voltage range	0-10 VDC	4 - 20 mA
1 mA control	13/16 mA @= 5 V/24 V	29 mA @= 220 VAC
Voltage to the connection	1,9 VDC	-
Voltage to the disconnection	1,9 VDC	-
Maximum reverse voltage	32 VDC	-
Max. delay to the connection	10 ms	-
Max. delay to disconnection	½ ciclo	-

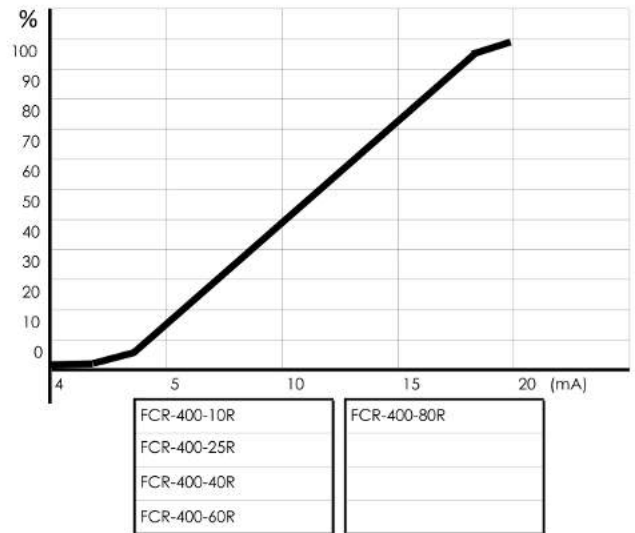
Output specifications

Maximum load current	(AC51 @ Ta = 25° C)	5, 12, 20, 30, 40, 50, 60, 100 A
	(AC53a @ Ta = 25° C)	-
Load voltage range	50 - 400 VAC	
Frequency range	50 - 60 Hz	
Maximum non-repetitive voltage peak	600Vp	
Maximum non-repetitive current peak (t = 10ms)	350 Ap / 25 A	910 Ap / 80 A
	500 Ap / 40 A	-
	630 Ap / 60 A	1100 Ap / 100 A
Maximum leakage current	8 mArms	
dv / dt minimum at disconnection	200 V / µseg	
Max. voltage drop in operation	1,6 VAC	
Minimum load current	0,15 - 0,25 Arms	
I ² t (10 ms) (indicative data)	625 A ² s (25 A)	4.225 A ² s (80 A)
	1.250 A ² s (40A)	-
	2.025 A ² s (60A)	6.050 A ² s (100A)

Cover

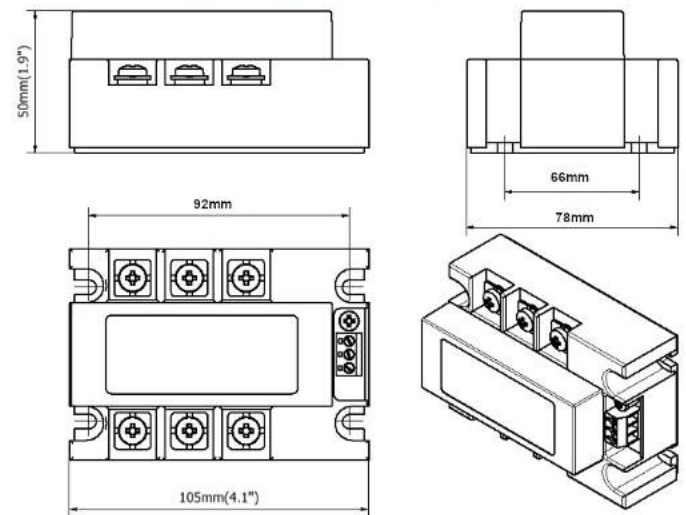
Dimensions (L x W x H mm)	105 x 75 x 47
Weight	600 gr máx.
Metallic base	Nickel plated brass
Max. torque: control terminal (M3x6)	1,2 Nm
Max. torque: power terminal (M5x9)	2,4 Nm

Input control curve vs. resistive load output

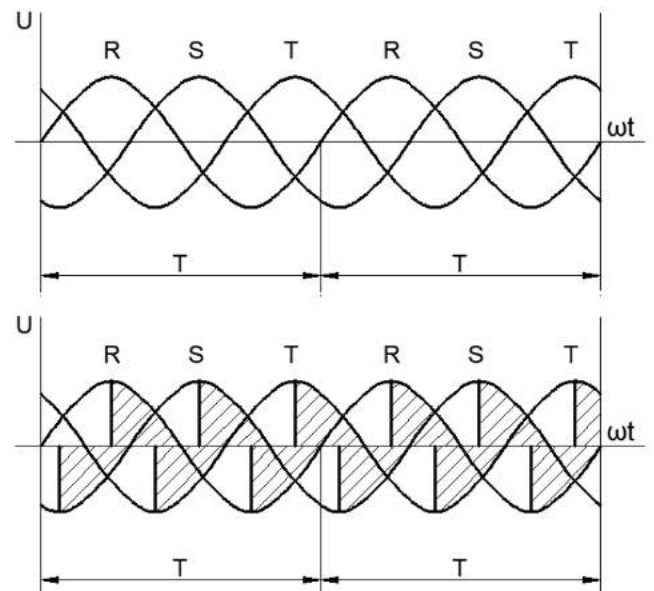


- » For currents greater than 10 A, a heatsink must be used. However even if the load current does not exceed 10A, the use of a heatsink It will extend the life of the relay up to four times longer.
- » The regulator model must have at least twice the rated current output of the resistive loads to be controlled
- » Controls only resistive loads and LED lighting.

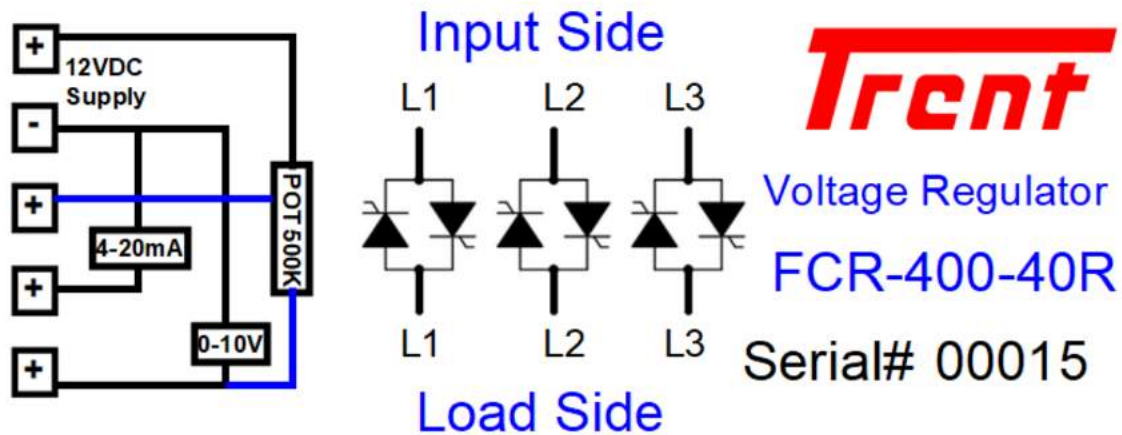
Dimensions (mm-pulgadas)



Diagrams



FCR 3 Phase Regulator Wiring



Example - 4-20mA input Connections

