



- » Single phase 2 input ranges: 3-32VDC and 90-280VAC.
- » Maximum load current (AC1 at 25° C): 25, 60, 80, 100, 120A.
- » Operational ratings: 70 - 480 VAC.
- » Frequency range: 50- 60 Hz.
- » Maximum non-repetitive peak voltage: 930 Vp.
- » LED indicator.
- » Clip on protective cover for greater safety (IP 20).

References

Control voltage	Switching Type	Operational current	Reference	Reference heat sink
3 - 32 VDC 90 - 280 VAC	Random Crossing	80 A	FDH12048RD3	H31/150
		120 A	FDH12048RD3	H31/200
		80 A	FDH8048RA4	H31/150
		120 A	FDH12048RA4	H31/200
3 - 32 VDC 90 - 280 VAC	Zero Crossing	80 A	FDH12048ZD3	H31/150
		120 A	FDH12048ZD3	H31/200
		80 A	FDH12048ZA4	H31/150
		120 A	FDH12048ZA4	H31/200

Over 10 A load a heat sink must be used. The use of a heat sink will make the lifetime of the relay up to four times longer, even when using it with load currents lower than 10 A.

General specifications

Dielectric insulation (between input & output)	2,500 VAC
Operating temperature	-25 °C to 70 °C
Storage temperature	-35 °C to 85 °C
Rth junction to case	2,5° C/W (25 A) 0,65° C/W (60 A) 0,5° C/W (80 A) 0,3° C/W (100/120 A)
Ambient humidity	Operating: up to 85 %
CE marking	Yes

Input specifications

	VDC input	VAC input
Control voltage range	3 - 32 VDC	90 - 250 VAC
Input current (max)	10/16 mA @= 5 V/24 V	29 mA @= 220 VAC
Pick-up voltage	1,9 VDC	70 VAC
Drop-out voltage	1,9 VDC	70 VAC
Maximum reverse voltage	32 VDC	-
Max. response time pick-up	½ cycle	1 cycle
Max. response time drop-out	½ cycle	2 cycles

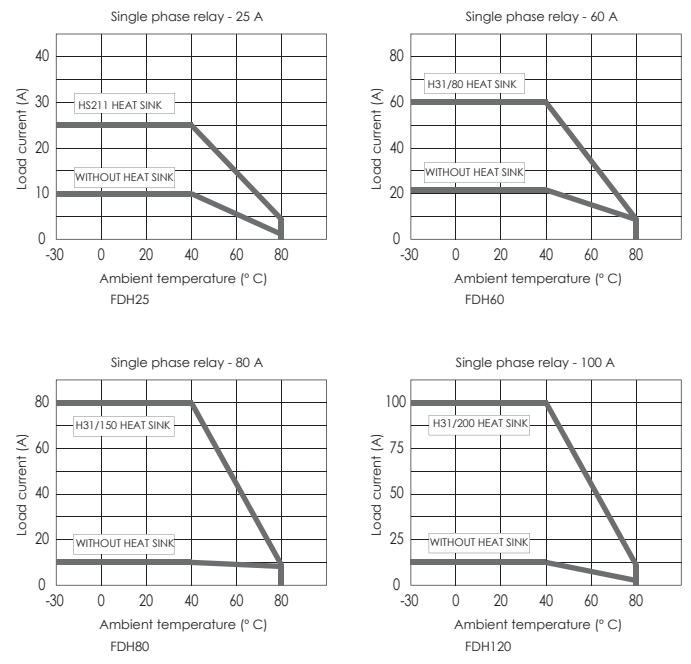
Output specifications

Maximum load current (AC51 @ Ta = 25° C)	25, 60, 80, 100, 120 A
(AC53a @ Ta = 25° C)	5, 15, 18, 20 A
Load voltage range	70 - 480 VAC
Frequency range	50 - 60 Hz
Max. non-repetitive peak voltage	930 Vp
Max. non-repetitive peak current (t=10ms)	350 Ap / 25 A 910 Ap / 80 A 630 Ap / 60 A 1100 Ap / 100(120) A
Maximum off state leakage current	10 mArms
Minimum off state dv / dt	200 V / useg
Maximum on state voltage	<1,6 VAC
Minimum load current	0,1 Arms
t ₂ (10 ms) (orientative data)	625 A ² s (25 A) 4.225 A ² s (80 A) 2.025 A ² s (60A) 6.050 A ² s (100/120A)

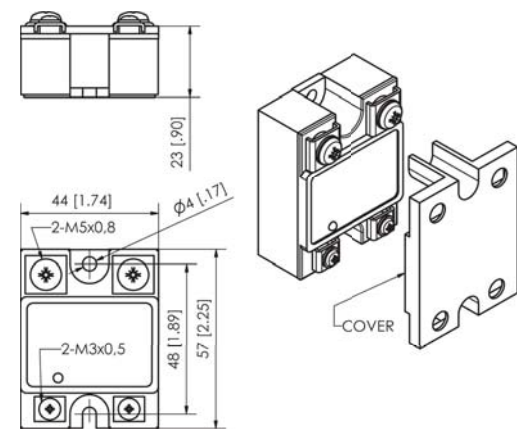
Housing specifications

Dimensions (L x W x H mm)	57 x 44 x 23
Weight	150 gr max.
Baseplate	Aluminum, nickel-plated
Control terminal (M3x6) torque	1,2 Nm
Power terminal (M5x9) torque	2,4 Nm

Load current vs. ambient temperature



Dimensions (mm-inch)



Diagrams

