



- » 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	25 A	FDH2548RD3	HS211
		60 A	FDH6048RD3	H31/80
		25 A	FDH2548RA4	HS211
		60 A	FDH6048RA4	H31/80
3 - 32 VDC 90 - 280 VAC	Zero Crossing	25 A	FDH2548ZD3	HS211
		60 A	FDH6048ZD3	H31/80
		25 A	FDH2548ZA4	HS211
		60 A	FDH6048ZA4	H31/80

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

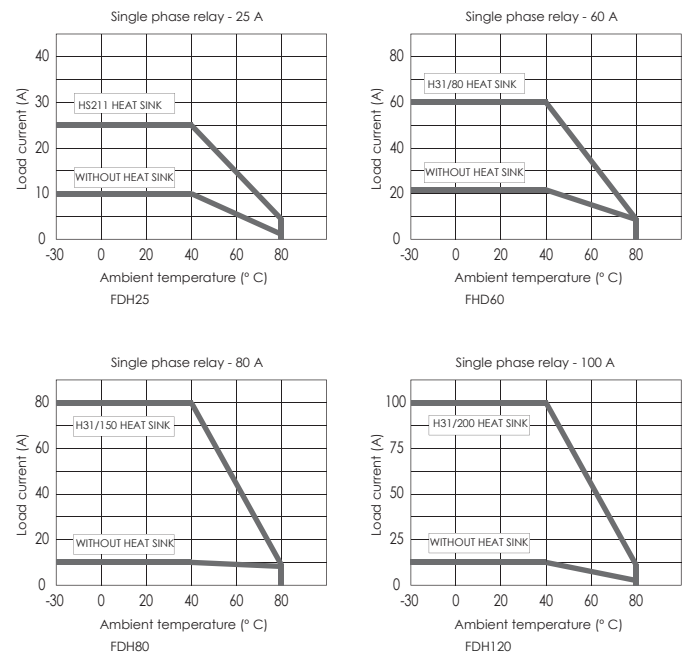
### Output specifications

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 <sub>2</sub> (10 ms) (orientative data)	625 A <sup>2</sup> s (25 A)   4.225 A <sup>2</sup> s (80 A) 2.025 A <sup>2</sup> s (60A)   6.050 A <sup>2</sup> s (100/120A)

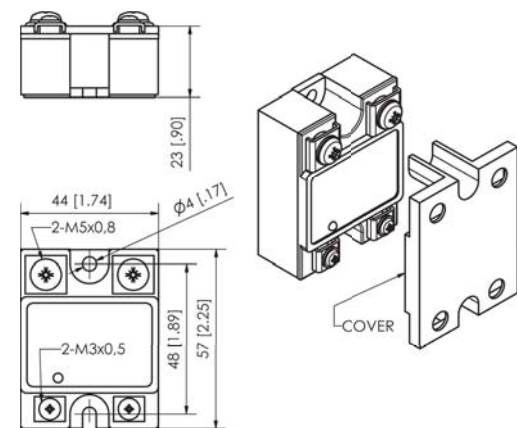
### Housing specifications

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

