

## AF750

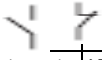
### Description

**AF750 are mainly used for controlling 3-phase motors and power circuits up to 1000V AC or 850V DC.**

These contactors are of the block type design with:

- 3 main poles
- control circuit: AC or DC controlled with electronic coil interface accepting a wide control voltage range (e.g. 100 ... 250V AC and DC)
- can manage large voltage variations
- only 4 coils to cover control voltages between 48 ... 500V AC 50/60 Hz and 24V ... 500V DC
- reduced panel energy consumption
- very distanced closing and opening
- can withstand short voltage dips and voltage sags (SEMI F47 conditions of use on request)
- built-in surge suppression
- add-on auxiliary contact blocks for side mounting and a wide range of accessories

### Ordering details

IEC		UL/CSA		Control circuit voltage Uc		Auxiliary contacts fitted	Type	Order code	Weight Pkg (1 pce)
Rated operational power 400V (kW)	Rated operational current 690V AC	3-phase motor rating 480V AC (hp)	General use rating 600V AC	50/60 Hz	V DC				
400	1050	600	900	-	24 ... 60	1 1	AF750-30-11	1SFL637001R6811 (1)	15.00
400	1050	600	900	48 ... 130	48 ... 130	1 1	AF750-30-11	1SFL637001R6911	15.00
400	1050	600	900	100 ... 250	100 ... 250	1 1	AF750-30-11	1SFL637001R7011	15.00
400	1050	600	900	250 ... 500	250 ... 500	1 1	AF750-30-11	1SFL637001R7111	15.00

## Technical data AF750

### Magnet system characteristics

<b>Coil operation limits</b> According to IEC 60947-4-1	$\theta \leq 70\text{ }^{\circ}\text{C}$ 0.85 ... 1.1 x U <sub>c</sub>	<b>Operating time</b> <b>Coil supply between A1 - A2</b> between coil energization and: N.O. and auxiliary contact closing N.C. and auxiliary contact opening between coil de-energization and: N.O. and auxiliary contact closing N.C. and auxiliary contact opening	50 ... 120 ms 50 ... 120 ms 33 ... 70 ms 33 ... 70 ms
<b>Drop-out voltage in % of U<sub>c</sub> min. level</b>	55%	<b>Control input for PLC's</b> between coil energization and: N.O. and auxiliary contact closing N.C. and auxiliary contact opening between coil de-energization and: N.O. and auxiliary contact closing N.C. and auxiliary contact opening	40 ... 90 ms 40 ... 90 ms 10 ... 30 ms 10 ... 30 ms
Coil consumption			
Average pull-in	50 Hz 60 Hz d.c.	850 VA 850 VA 950 W	
Average holding	50 Hz 60 Hz d.c.	12 VA / 4.5 W 12 VA / 4.5 W 4.5 W	

### Main pole - Characteristics acc. IEC/EN standards

<b>Rated operational voltage U<sub>e</sub> max.</b>	1000 V	<b>Heat dissipation per pole I<sub>e</sub></b> - AC-1 - AC-3	50 W 28 W
<b>Rated frequency limits</b>	50 / 60 Hz	<b>Max. electrical switching frequency</b> - AC-1 - AC-3 - AC-2, AC-4	300 cycles/h 300 cycles/h 60 cycles/h
<b>Conventional free-air thermal current I<sub>th</sub></b> acc. to IEC 60947-4-1, open contactors, $\theta \leq 40\text{ }^{\circ}\text{C}$ <b>with conductor cross-sectional area</b>	1050 A 800 mm <sup>2</sup>	<b>Mechanical durability</b> - Number operating cycles - Max. switching frequency	3 Millions 300 cycles/h
<b>AC-1 Utilization category</b> for air temperature close to contactor		<b>Operating altitude without derating</b>	$\leq 3000\text{ m}$
<b>I<sub>e</sub> / Rated operational current</b>		<b>Rated insulation voltage U<sub>i</sub></b>	1000 V
U <sub>e</sub> max. $\leq 690\text{ V}$ , 50/60 Hz	$\theta \leq 40\text{ }^{\circ}\text{C}$ 1050 A $\theta \leq 55\text{ }^{\circ}\text{C}$ 875 A $\theta \leq 70\text{ }^{\circ}\text{C}$ 720 A	<b>Rated impulse voltage withstand U<sub>imp</sub></b>	8 kV
U <sub>e</sub> max. $\leq 1000\text{ V}$ , 50/60 Hz	$\theta \leq 40\text{ }^{\circ}\text{C}$ 1050 A $\theta \leq 55\text{ }^{\circ}\text{C}$ 875 A $\theta \leq 70\text{ }^{\circ}\text{C}$ 720 A	<b>Rated short time withstand current I<sub>cw</sub></b>	$\leq 1\text{ s}$ 7000 A 10 s 6400 A 30 s 4500 A 1 min 3500 A 15 min 1300 A
<b>with conductor cross-sectional area</b>	800 mm <sup>2</sup>	<b>Air temperature</b> Close to contactor - fitted with electronic O/L relay - without O/L relay - for storage	-25 to +70 °C -40 to +70 °C -40 to +70 °C
<b>AC-3 Utilization category</b> for air temperature close to contactor $\theta \leq 55\text{ }^{\circ}\text{C}$			
<b>I<sub>e</sub> / Max. rated operational current</b>			
<b>3-phase motors</b>	<b>220-230-240 V</b> 750 A <b>380-400 V</b> 750 A <b>415 V</b> 750 A <b>440 V</b> 750 A <b>500 V</b> 750 A <b>690 V</b> 650 A <b>1000 V</b> 300 A		



### Characteristics acc. UL/CSA standards

<b>General use rating</b>	<b>600 V a.c.</b> 900 A
<b>3-phase motor rating</b>	200-208 V 250 hp 220-240 V 300 hp 440-480 V 600 hp 550-600 V 700 hp

### Dimensions (in mm)

