## **ELECTRICAL & POWER**



175 Amp 3-Phase Contactor

# **NEW AC AND DC CONTACTORS**

Safran Electrical & Power's facility in Sarasota is a leading manufacturer of Aerospace Contactors and is investing in a complete upgrade of the Contactor Portfolio. The upgrades will include significant design improvements to the singlephase DC contactors and three-phase AC contactors as well as the introduction of new RCCB/Smart Contactor. The contactors will use the latest in advanced materials and innovative packaging techniques to reduce size and weight while improving thermal efficiency. These new contactors are scheduled to be available for sale by the end of 2018.

#### The new line of Safran Electrical & Power's contactors will include:

SINGLE PHASE 28Vdc CONTACTORS				
Current Rating	200 A	400 A	600 A	
Corresponding Power at 28Vdc	5.6 Kw	11 Kw	17 Kw	
Weight (Kg)	0.16 Kg	0.18 Kg	0.20 Kg	



SM1-400 400 Amp DC Contactor

#### Key Features and Benefits are:

- Optimized Weight
- Increased Reliability /Robustness
- Improved thermal efficiency

THREE PHASE 115/230VAC CONTACTORS					
Current Rating	60 A	130 A	175 A	260 A	
Corresponding Power at 115VAC	20 KVA	45 KVA	60 KVA	90 KVA	
Corresponding Power at 230VAC	40 KVA	90 KVA	120 KVA	180 KVA	
Weight (Kg)	0.29 Kg	0.54 Kg	0.56 Kg	0.71 Kg	



Three Phase AC Contactors

- Optimized Volume
- Modular auxiliaries (quantity & current rating)
- Minimized in rush current on actuation coil



## Key functional characteristics of the new three-phase contactors are:

	SM3-60	SM3-130	SM3-175	SM3-260
		C	Exasystem Skore of	M3-26
Nominal Current @ 115V	60 A	130 A	175 A	260 A
Nominal Current @ 230V	30 A	65 A	85 A	130 A
Frequency Range	360-800Hz	360-800Hz	360-800Hz	360-800Hz
Rupture Current	10X Rated Current	10X Rated Current	10X Rated Current	10X Rated Current
Max Pick-up/Hold Current	0.75/3 A	0.75/3 A	0.75/3 A	0.75/3 A
Contacts Max Close/Release Times	20ms/20ms	20ms/20ms	20ms/20ms	20ms/20ms
Auxiliaries	4 NO & 4 NC	5 NO & 5 NC	5 NO & 5 NC	5 NO & 5 NC
Mechanical Life	100,000 Cycles	100,000 Cycles	100,000 Cycles	100,000 Cycles
Weight (Kg)	0.29 Kg	0.54 Kg	0.56 Kg	0.71 Kg

Note that all values listed in the table above are preliminary pending completion of qualification testing.

## Additional testing that will be performed:

Radio Frequency Susceptibility	RTCA/DO160G Section 20, CAT G Radiated, CAT W Conducted
Emission of Radio Frequency	RTCA/DO160G Section 21, CAT M
Vibration	RTCA/DO160G Section 8, CAT R, Curve C
Lighting Induced Signal Susceptibility	RTCA/DO160G Section 22, B3H3L3
Humidity	RTCA/DO160G Section 6, CAT A
Explosive Atmosphere	RTCA/DO160G Section 9, CAT A
Waterproofness	RTCA/DO160G Section 10, CAT W
Fungus Resistance	RTCA/DO160G Section 13, CAT F
Salt Fog	RTCA/DO160G Section 14, CAT S
Power Input	RTCA/DO160G Section 16, CAT Z
Voltage Spike	RTCA/DO160G Section 17, CAT A

## New RCCB/Smart Contactor 3-Phase AC 20 to 60 Amps (Scalable for 175A and 260A Contactors):

#### **RCCB Key characteristics:**

- Bus bar mounted
- AC and DC sensing
- Limited heat emission
- Light weight
- Optimized foot print
- Versatile interface
- Embedded EMI protection
- Fast trip logic
- Advance trip logic (phase lost, GFI, DC in AC)
- Programmable trip curve
- Health monitoring

#### New technologies introduced:

- Programmable Hall effect sensor
- Embedded temperature sensor
- Electronic control of coil current
- PCB embedded auxiliary switches

