



## CF – Multipole AC power contactors

Schaltbau's new, highly modular CF series begins with a compact 3-pole AC power contactor for loads up to 600 A and 3000 V for inverter-fed alternating current drives with higher frequencies. One special feature are the newly developed switching chambers. These can be universally configured as NO, NC or in combination as a change-over.

An efficient electronic economy circuit reduces power consumption as well as heat loss and saves costs.

- Compact dimensions – high performance range: 3,000 Volt AC / 3x 600 Ampere, frequencies up to 400 Hertz
- Innovative application-dependent arc chamber design – configurable as NO, NC or changeover contact
- High thermal continuous current 300 amps or 600 amps through parallel connection of two main contacts each and a high rated short-time withstand current up to 4,000 amps

CF contactors can be adapted in many ways. The high variance makes the devices interesting for use in many different applications. The innovative switchgear is equally ideal for new projects and modernisation. They can successfully replace cam contactors that have proven themselves over many years. DC variants will follow.

- 4 auxiliary switches for diagnosis and switching status monitoring
- Low energy consumption and low heating thanks to sophisticated coil saving circuit

### Ordering code

Example: **CFS3-15-12121200000N-AM-41**

#### Series, contact configuration

CFS1 / CFS2 / CFS3 1 / 2 / 3 pole AC contactor  
CFW4 / CFW5 / CFW6 4 / 5 / 6 pole AC contactor

#### Nominal voltage $U_n$

15 / 30 1,500 V AC / 3,000 V AC

#### Version / 1x per main contact

1 / 2 NO / NO + insulating panel  
3 / 4 NC / NC + insulating panel

#### Auxiliary switches, number / type

Number 1 / 2 / 3 / 4

S870 silver contacts – S870 gold contacts 1 / 2

#### Coil design

Monostable / monostable with control impulse M / N

#### Coil voltage $U_s$

24 V DC / 110 V DC A / C

#### Conventional thermal current $I_{th}$ / 1x per main contact

300 A AC,  $f \leq 400$  Hz: Plastic / metal extinguishing element 8 / 9

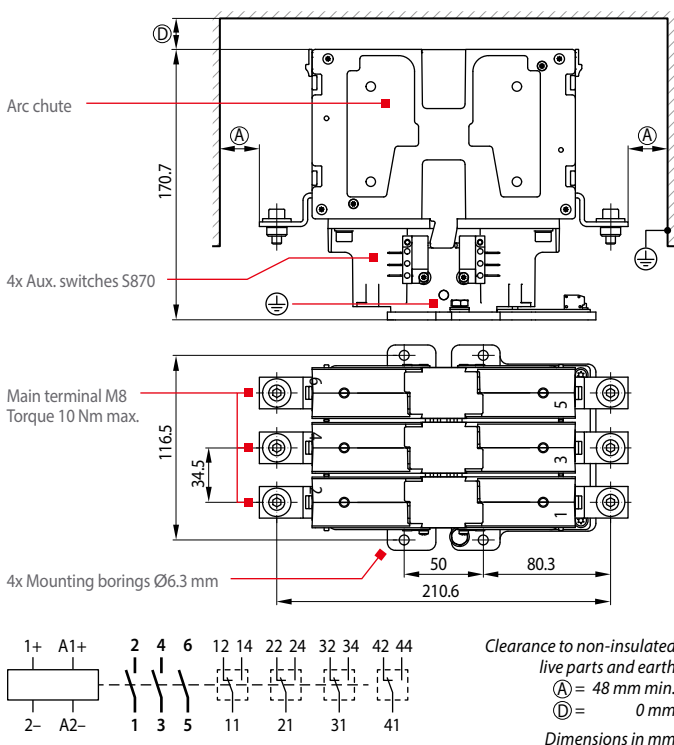
200 A AC,  $f \leq 400$  Hz: Plastic / metal extinguishing element M / C

End insulating panel with/without Y / N



**Note:** Series is being expanded. Further variants and configurations will follow.

### CFS3 Dimension diagram, circuit diagram



### Specifications

Series	CFxx-15-...	CFxx-30-...
Type of voltage	AC ( $f < 400$ Hz)	
Main contacts	Number of NO / NC 1 ... 6 / ☺ / ☹	
Nominal voltage $U_n$	1,500 V	3,000 V
Rated operating voltage $U_e$	1,500 V	3,000 V
Rated insulation voltage $U_{Nm}$	3,000 V @ PD3, OV3 3,600 V @ PD3, OV2	
Rated imp. withst. voltage $U_{Ni}/U_{imp}$	25 kV	
Pollution degree	PD3	
Overvoltage category	OV3	
Conventional thermal current $I_{th}$	1 ... 3 Pole: 200 A / 300 A	
Component category	A2	
Rated short-time withstand current $I_{cw}$	4 kA / $T < 100$ ms	
Aux. contacts	Number, configuration	4x max. Snap-action switch S870
	Utilization category (EN 60947-5-1)	AC-15: 230 VAC/1.5 A; DC-13: 60 VDC/0.5 A
Magnetic drive	Coil voltage $U_s$	24 / 110 V DC
	Coil tolerance	0.7 ... 1.25 x $U_s$
Vibration / Shock	IEC 61373	Category 1, Class B
Mechanical endurance	1 million operating cycles	
Mounting position	horizontal, vertical (do not mount upside down)	
Temperatures	-40° C ... +70° C	
Weight	approx. 4 kg	