Lighting circuit switching
Contactor selection

AF09-40-00

AF80-40-00

General

Contactor selection criteria for control of lighting circuits are as follows:

– type, power rating and number of lamps,
– connection mode,
– current values on closing and in steady state,
– power factor,
– presence or not of correction capacitors.

Lighting circuits

In a given circuit, the number and power rating of lamps are defined and cannot result in overload. Only short-circuit protection has to be provided. J fuses or modular circuit-breakers will be chosen for this purpose. The lamps have very specific technical data, according to their construction type.

– Incandescent lamps have a very high current on closing: more than 15 times nominal current They do not introduce a large phase displacement between current and voltage.
– Fluorescent tubes are equipped with a ballast whose purpose is two-fold: contribute to ignition and limit current to nominal value once steady state is reached. This ballast is a reactor that considerably lowers the power factor. It may or may not be compensated.

Selection Tables - Lighting Contactors

Amp rating	Number of poles	Electrically held	Mechanically held[1)]
20	4	AF09-40-00- ☐☐	AF09L-40-00- ☐☐
20	8	AF09-80-00- ☐☐	AF09L-80-00- ☐☐
20	12	AF09-120-00- ☐☐	AF09L-120-00- ☐☐
30	4	AF16-40-00- ☐☐	AF16L-40-00- ☐☐
30	8	AF16-80-00- ☐☐	AF16L-80-00- ☐☐
30	12	AF16-120-00- ☐☐	AF16L-120-00- ☐☐
45	4	AF26-40-00- ☐☐	AF26L-40-00- ☐☐
45	8	AF26-80-00- ☐☐	AF26L-80-00- ☐☐
45	12	AF26-120-00- ☐☐	AF26L-120-00- ☐☐
50	4	AF38-40-00- ☐☐	AF38L-40-00- ☐☐
65	3	AF40-30-00- ☐☐	AF40L-30-00- ☐☐
80	3	AF52-30-00- ☐☐	AF52L-30-00- ☐☐
90	3	AF65-30-00- ☐☐	AF65L-30-00- ☐☐
105	3	AF80-30-00- ☐☐	AF80L-30-00- ☐☐
115	3	AF96-30-00- ☐☐	AF96L-30-00- ☐☐
160	3	AF116-30-11- ☐☐	
200	3	AF140-30-11- ☐☐	
250	3	AF190-30-11- ☐☐	
300	3	AF205-30-11- ☐☐	
400	3	AF265-30-11- ☐☐	

[1)] See accesories section for mechanical latch technical data.

Coil voltages and codes

Voltage (V) 50/60Hz	Voltage Code : ☐ ☐
24 ... 60	11
48 ... 130	12
100 ... 250	13
250 ... 500	14