



EEC - Line Contactors

3 & 4 Pole Contactors with DC operating coils. Characteristics

General Characteristics			
Type		Unit	EEC 09 – EEC 80
Rated insulation voltage (U_i)	(Conforming to IEC 158-1)	V	750
	VDEO 110grC/IEC 947-4	V	1000
Conforming to standards			NFC63-110, VDE0660, BS5424, JEM1038 & IEC60947-4
Approvals			UL, CSA, IEC
Degree of Protection	Conforming to VDE 0106		Protection against direct finger contacts
Protective treatment	Standard version		"TH"
Ambient air temperature (around the device)	Storage	°C	-60 to +80
	Operation	°C	-5 to +55 (0.8 to 1.1 U_c)
	Permissible	°C	-40 to +70, for operation at U_c
Maximum operating altitude	Without derating	Mtr.	3000
Operating Position	Without derating		+30° possible, in relation to normal vertical mounting plane

Pole Characteristics

Type	EEC	Unit	EEC 12	EEC 18	EEC 25	EEC 32	EEC 40	EEC 50	EEC 65	EEC 80
Number of poles										
Power + Auxiliary			4	-	4	-	4	-	4	4
			or	-	or	-	or	-	or	or
			3+1	3+1	3+1	3+1	3+2	3+2	3+2	3+2
Rated current (I_e)	In AC-3 $\theta \leq 55^\circ\text{C}$	A	12	18	25	32	40	50	65	80
Rated operating Voltage (U_e)	Up to	V	690	690	690	690	690	690	690	690
Frequency limits	Of the operational current	Hz				25-400				
Rated thermal current (I_{th})	$\theta \leq 40^\circ\text{C}$	A	25	32	45	50	60	80	80	125
Rated making capacity	I_{rms} conforming to IEC-947-4	A	250	300	450	550	800	900	1000	1100
Rated breaking capacity	I_{rms} conforming to IEC-947-4 220-440V	A	250	300	450	550	800	900	1000	1100
		A	175	250	400	450	800	900	1000	1000
		A	85	120	180	180	400	500	630	640
Average impedance per pole At I_{th} and 50Hz		m Ω	2.5	2.5	2	2	1.5	1.5	1	0.8
Power dissipation per pole for AC-3		W	0.36	0.8	1.25	2	2.4	3.7	4.2	5.1

Control Circuit Characteristics

Type		Unit	EEC09-EEC18	EEC25-EEC32	TP1-D4011-D65	TP1 -D80	
Rated control circuit voltage (U_c)	DC	V		12 to 660		12 to 660	
Control voltage limits ($\theta \leq 55^\circ\text{C}$)	Operational	Standard Coil		0.8 – 1.1 U_c		0.85 - 1.1 U_c	
		Wide Range Coil		0.7 – 1.25 U_c		0.75 - 1.25 U_c	
	Drop out			0.1 – 0.25 U_c		0.1 - 0.3 U_c	
Average consumption DC @ 20°C and at U_c	DC	Inrush	W	9	11	22	22
		Sealed	W	9	11	22	22
Average operating time at U_c	Closing time "C"	msec		40-48	52-64	85-110	95-130
	Opening time "O"	msec		6-14	8-14	20-35	20-35
Mechanical life U_c (mechanical durability)	In millions of operating cycles			30	25	20	20
Maximum operating rate (@ ambient temp. of $\theta \leq 55^\circ\text{C}$)	In operating cycle/hour			3600	3600	3600	3600

Integral Auxiliary Contact Characteristics

Type		Unit	EEC 09 – EEC 80
Rated thermal current (I_{th})	$\theta \leq 40^\circ\text{C}$	A	10
Rated operational voltage (U_e)	Up to	V	660