



Author/Date	Kapfer / 2020-11-06	 <small>Connect · Contact · Control</small>
Version:	V1.1 – first edition	

Technical Data

C360A contactor line (mono- and bi-stable)

Serie	C360A/150	C360A/300	C360A/500
Kind of current	DC AC (f ≤ 60 Hz, max. 1000 V)	DC AC (f ≤ 60 Hz, max. 1000 V)	DC AC (f ≤ 60 Hz, max. 1000 V)
Main contacts (poles)	1 (NO)	1 (NO)	1 (NO)
Rated operational voltage U_e (max.)	1.000 V (PD3) 1.500 V (PD2)	1.000 V (PD3) 1.500 V (PD2)	1.000 V (PD3) 1.500 V (PD2)
Rated insulation voltage U_i	1.000 V (PD3) 1.500 V (PD2)	1.000 V (PD3) 1.500 V (PD2)	1.000 V (PD3) 1.500 V (PD2)
Rated impulse withstand voltage U_{imp}	10 kV	10 kV	10 kV
Overvoltage category	OV3	OV3	OV3
Conventional free air thermal current I_{th} $T_a = 40\text{ °C}$ $T_a = 70\text{ °C}$	150 A 150 A	300 A 300 A	500 A 400 A
Power dissipation per pole (I_{th} @ 40 °C) typ.	3,5 W	11 W	30 W
Pole impedance, typ.	150 $\mu\Omega$	120 $\mu\Omega$	120 $\mu\Omega$
Component category (IEC 60077-2)	B	B	B
Breaking capacity I_e (L/R = 1 ms) DC, $U_e = 900\text{ V}$	150 A	150 A	150 A
Breaking capacity I_e ($\cos\varphi = 0,8$) AC, $U_e = 900\text{ V}$	420 A	420 A	420 A
Rated short-time withstand current I_{cw} 1s	3.000 A	3.000 A	3.000 A
Critical current range	None	None	None
Additional electrical ratings of main circuit			
Conventional free air thermal current I_{th} $T_a = 85\text{ °C}$ (Cross section) Terminal heating T_t	200 A (50 mm ²) 45 K	350 A (120 mm ²) 45 K	500 A (185 mm ²) 65 K
Power dissipation per pole (I_{th}), typ.	5,0 W	15 W	30 W
Pole impedance, typ.	125 $\mu\Omega$	120 $\mu\Omega$	120 $\mu\Omega$
Short-circuit-protection device (without thermal overload-release) $I_{prosp} = 10\text{ kA DC}$ Type of assignment „2“ Fuse: SIBA SQB-DC 2 (aR Type)	200 A	315 A	2 x 250 A (parallel)
Utilization category AC-1 / AC General Use $U_e = 750\text{ V}$ Rated operating current I_e	60 A	60 A	60 A
Utilization category DC-1 / DC General Use $U_e = 750\text{ V}$ Rated operating current I_e	60 A	60 A	60 A
Switching frequency operations per hour I_e / AC-1 & DC-1	360 h ⁻¹	360 h ⁻¹	360 h ⁻¹
Short-circuit making capacity I_{cm} (L/R = 0 ms) mono- or bi-stable drive (dependent on component category)	monostabil horizontal: 2.500 A vertikal: 2.000 A bistabil horizontal: 750 A vertikal: 750 A	monostabil horizontal: 2.500 A vertikal: 2.000 A bistabil horizontal: 750 A vertikal: 750 A	monostabil horizontal: 2.500 A vertikal: 2.000 A bistabil horizontal: 750 A vertikal: 750 A
Breaking capacity ($L_{max} = 0,25\text{mH}$, other values on request) Single contact $U_e = 1.500\text{ V} / I_e = 50\text{ A}$ $U_e = 900\text{ V} / I_e = 400\text{ A}$ $U_e = 750\text{ V} / I_e = 500\text{ A}$ $U_e = 500\text{ V} / I_e = 750\text{ A}$ (bi-stable) $U_e = 500\text{ V} / I_e = 800\text{ A}$ (mono-stable) Two contacts in the circuit $U_e = 1.500\text{ V} / I_e = 500\text{ A}$ $U_e = 1.000\text{ V} / I_e = 800\text{ A}$ Operating conditions on request	60 Schaltungen	60 Schaltungen	60 Schaltungen
Electrical endurance	8000 operations DC (L/R = 1 ms), AC ($\cos\varphi = 0,8$): 750 V / 60 A	8000 operations DC (L/R = 1 ms), AC ($\cos\varphi = 0,8$): 750 V / 60 A	8000 operations DC (L/R = 1 ms), AC ($\cos\varphi = 0,8$): 750 V / 60 A

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Main contacts Contact material Terminals Torque	AgSnO ₂ M8 Max. 6 Nm	AgSnO ₂ M10 Max. 10 Nm	AgSnO ₂ M10 Max. 10 Nm
Auxiliary contacts Number, configuration Contact material Making / breaking capacity S880 Terminals Minimum voltage / current	1x S880 W1R6 A Silver AC-15: 230 VAC / 1.0 A; DC-13: 60 VDC / 0.5 A Flat quick connect 2.8 x 0.5 mm 5 V / 5 mA		
Magnetic drive (monostable) Pollution degree / Overvoltage category Rated control supply voltage U_s Operating range	PD3 / OV2 12 – 24 V 9.5 V - 36 V	PD3 / OV2 12 – 24 V 9.5 V - 36 V	PD3 / OV2 12 – 24 V 9.5 V - 36 V
Coil power dissipation, max. ($T_a = 20\text{ °C} / U_s$) Pull-In Power (0.2s) Holding Power	50 W (24 V) 2.6 W	50 W (24 V) 2.6 W	50 W (24 V) 2.6 W
Frequency of operation (operations per hour) (No load) $T_a = 20\text{ °C}$ $T_a = 70\text{ °C}$	3,600 h ⁻¹ 1,800 h ⁻¹	3,600 h ⁻¹ 1,800 h ⁻¹	3,600 h ⁻¹ 1,800 h ⁻¹
Typical pull-in time ($T_a = 20\text{ °C} / U_s$) Typical drop-off time ($T_a = 20\text{ °C} / U_s$) Coil suppression (integrated) Coil terminal (flat tap)	33 ms 25 ms Suppressor diode 6.3 x 0.8 mm	33 ms 25 ms Suppressor diode 6.3 x 0.8 mm	33 ms 25 ms Suppressor diode 6.3 x 0.8 mm
Magnetic drive (bi-stable) Pollution degree / Overvoltage category Rated control supply voltage U_s (ON-Time 0.1 – max. 0.5 s) Minimum operating voltage	PD3 / OV2 24 V 15 V	PD3 / OV2 24 V 15 V	PD3 / OV2 24 V 15 V
Coil power dissipation, max. ($T_a = 20\text{ °C} / U_s$)	35 W	35 W	35 W
Frequency of operation (operations per hour) (No load) $T_a = 20\text{ °C} / 70\text{ °C}$	1,800 h ⁻¹	1,800 h ⁻¹	1,800 h ⁻¹
Typical pull-in time ($T_a = 20\text{ °C} / U_s$) Typical drop-off time ($T_a = 20\text{ °C} / U_s$) Coil suppression (integrated) Coil terminal (flat tap)	20 ms 13 ms Suppressor diode 6.3 x 0.8 mm	20 ms 13 ms Suppressor diode 6.3 x 0.8 mm	20 ms 13 ms Suppressor diode 6.3 x 0.8 mm
Dimensions	H = 89.7* / 99.7 mm W = 146.2 mm D = 81 mm *) without cover	H = 89.7* / 99.7 mm W = 146.2 mm D = 81 mm *) without cover	H = 89.7* / 99.7 mm W = 146.2 mm D = 81 mm *) without cover
Mounting position	vertical / horizontal (not upside-down)	vertical / horizontal (not upside-down)	vertical / horizontal (not upside-down)
Weight	0.83 kg	0.90 kg	0.95 kg
Degree of protection (IEC 60529)	IP00		
Mechanical endurance (operations)	monostable 2,000,000 bistable 100,000	monostable 2,000,000 bistable 100,000	monostable 2,000,000 bistable 100,000
Shock and Vibration EN 61373 ISO 16750-1	Category 1, class B Class C		
Temperature Operating temperature Storage temperature Altitude Humidity (EN 50125-1)	-40 °C ... +85 °C -40 °C ... +85 °C ≤ 4,500 m above sea level (other limits on request) < 75% yearly average		