



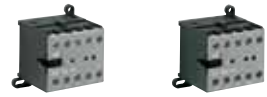
Motor starting solutions

- Perfect match in starter assembly with a large range of accessories.
- Short-circuit protection, type 1 and 2 coordination.
- Large offer of accessories for direct-on-line, reversing and star-delta starters which allows:
 - time / cost saving,
 - secure connection,
 - aesthetic starters,
 - easy assembly and wiring.



Mini contactors 3-pole contactors, for all industrial applications and motor starting

3-pole or 4-pole



IEC	AC-3 Rated operational power	$\theta \leq 55^\circ\text{C}^*$, 400 V	kW	4	5.5
UL/CSA	3-phase motor rating	480 V	hp	3	5
AC Control supply		Type	B6	B7	
DC Control supply		Type	BC6	BC7	
AC / DC Control supply		Type	—	—	
IEC	AC-3 Rated operational current	$\theta \leq 55^\circ\text{C}^*$, 400 V	A	9	12
	AC-1 Rated operational current	$\theta \leq 40^\circ\text{C}$, 690 V	A	16 (400 V)	20 (400 V)
UL/CSA	General use rating	600 V	A	12 (300 V)	16
NEMA	NEMA Size			—	—

* $\theta \leq 60^\circ\text{C}$ for AS(L)09 ... AS(L)16 and AF09 ... AF38 contactors

Main accessories

Auxiliary contact blocks	Front mounting Side mounting	CAF6 CA6
Timers	Pneumatic (Front mounting) Electronic	
Interlocking units (1)	Mechanical Mechanical / Electrical	
Connection sets	For reversing contactors	BSM6-30
Surge suppressors	Varistor (AC/DC) RC type (AC) Transil diode (DC)	RV-BC6 RD7

(1) See available reversing contactors VB6, VB7 and VAS09 ... VAS16

Overload relays

Thermal relays	Class 10 (10A or 20 for TA42DU to TA80DU)	T16 (0.10...16 A)
Accessories for thermal overload relays	Remote tripping coil Remote reset coil Wall/separate mounting kit	DB16
Electronic relays	Class 10E, 20E, 30E	E16DU (0.10...18.9 A)
Accessories for electronic overload relays	Wall/separate mounting kit	DB16E

Manual motor starters

	Thermal / magnetic protection	Class 10	MS116 for class 10A (0.10...32 A) lcs up to 50 kA MS132 (0.10...32 A) lcs up to 100 kA
		Class 20	
	Magnetic only types		MO132 (0.16...32 A)
Accessories	For contactor mounting Auxiliary trip units, auxiliary contacts, busbars		BEA7/132 HKF1, HK1, UA1, AA1, PS1, S1, SK1, CK1 (MS132, MO132 only)

New

New

New



4	5.5	7.5	4	5.5	7.5	11	15	18.5	18.5	22	30	37	45	55	75	90
5	7.5	10	5	7.5	10	15	20	20	30	40	60	60	60	75	100	125
AS09	AS12	AS16	AF09	AF12	AF16	AF26	AF30	AF38	A40	A50	A63	A75	A95	A110	A145	A185
ASL09	ASL12	ASL16	AF09	AF12	AF16	AF26	AF30	AF38	AL40	AE50	AE63	AE75	AF95	AF110	AF145	AF185
—	—	—	AF09	AF12	AF16	AF26	AF30	AF38	—	AF50	AF63	AF75	AF95	AF110	AF145	AF185
9	12	15.5	9	12	18	26	32	38	37	50	65	75	96	110	145	185
22	24	24	25	28	30	45	50	50	60	100	115	125	145	160	250	275
20	20	20	25	28	30	45	50	50	60	80	90	105	125	140	230	250
00	00	0	00	0	—	1	—	—	—	2	—	3	—	—	4	—

CA3-10 (1 x N.O.), CA3-01 (1 x N.C.)	CA4-10 (1 x N.O.), CA4-01 (1 x N.C.)	CA5-10 (1 x N.O.), CA5-01 (1 x N.C.)	
	CAL4-11 (1 x N.O. + 1 x N.C.)	CAL5-11 (1 x N.O. + 1 x N.C.)	CAL18-11 (1 x N.O. + 1 x N.C.)
		TP40DA, TP180DA Direct timing TP40IA, TP180IA Inverse timing	
TEF3-ON, TEF3-OFF			
VM3	VM4	VM5-1	VM300H / VM300V
	VEM4	VE5-1	VE5-2
BER16C-3	BER16-4	BER38-4	
RV5 (24...440 V)		BER40V	BEM75-30
RC5-1 (24...440 V)		BEM110-30	BEM185-30
RT5 (12...264 V)		BEM110-30	BEM185-30
		RC5-1 (24...440 V)	RC5-2 (24...440 V)
		RC5-1 (24...440 V)	RC5-2 (24...440 V)
		RT5 (12...264 V)	RC5-3 (250...440V)

T16 (0.10...16 A)	TF42 (0.10...38 A)	TA42DU (18...42 A)	TA75DU (18...80 A)	TA80DU (29...80 A) TA110DU (65...110 A)	TA200DU (66...200 A)
DB16	DB42	DB80	DB80, DB200	DB200	
	EF19 (0.10...18.9 A)	E45DU (9...45 A)	E80DU (27...80 A)	E140DU (50...140 A)	E200DU (60...200 A)
	EF19 (0.10...18.9 A), EF45 (9...45 A)	DB16E, DB80E	DB140E		

MS116 for class 10A (0.10...32 A) lcs up to 50 kA	MS450 (28...50 A) lcs up to 50 kA	MS495 (45...100 A) lcs up to 50 kA	
MS132 (0.10...32 A) lcs up to 100 kA	MS497 (22...100 A) lcs up to 100 kA	MS451 (11...50 A) lcs up to 50 kA	
		MS496 (28...100 A) lcs up to 100 kA	
MO132 (0.16...32 A)	MO450 (40...50 A) lcs up to 50 kA	MO495 (63...100 A) lcs up to 50 kA	
	MO496 (16...100 A) lcs up to 100 kA		
BEA16-3	BEA16-4	BEA38-4	
HKF1, HK1, UA1, AA1, PS1, S1, SK1, CK1 (MS132, MO132 only)		BEA40/450	BEA50/450, BEA75/495
		HK4, HKS4, UA4, AA4, PS4, S4, SK4	

Circuit breakers

Tmax Circuit breaker and accessories