

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 275A, AC/DC COIL, 440...480VAC/DC



Product designation			Power contactor
Product type designation			B180
Contact characteristics		N.I.	4
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	275
Operational current le		_	
	AC-1 (≤40°C)	Α	275
	AC-1 (≤55°C)	Α	250
	AC-1 (≤70°C)	Α	200
	AC-3 (≤440V ≤55°C)	Α	185
	AC-4 (400V)	Α	65
Rated operational power AC-1 (T≤40°C)			
	230V	kW	95
	400V	kW	160
	500V	kW	213
	690V	kW	298
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	75V	Α	260
	110V	Α	120
	220V	Α	_
	330V	Α	_
	460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	75V	Α	260
	110V	Α	170
	220V	Α	150
	330V	Α	_
	460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
· ·	75V	Α	260
	110V	Α	170
	220V	Α	170
	330V	Α	150
	460V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
,	75V	Α	260
	110V	Α	170
	220V	Α	170
	330V	Α	170
	460V	Α	150



11B180400440

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 275A, AC/DC COIL, 440...480VAC/DC

EC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	Α	180
	110V	Α	90
	220V	Α	_
	330V	Α	_
	460V	Α	_
EC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
· ·	75V	Α	180
	110V	Α	140
	220V	Α	100
	330V	Α	_
	460V	A	_
EC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	400 V		
in content le in Dos-Dos with L/N = 13ms with 5 poles in series	75\/	۸	100
	75V	A	180
	110V	A	160
	220V	A	140
	330V	Α	100
	460V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	Α	180
	110V	Α	160
	220V	Α	160
	330V	Α	160
	460V	Α	100
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1500
Protection fuse			
	gG (IEC)	Α	315
	aM (IEC)	Α	200
Making capacity (RMS value)	, ,	Α	1850
Breaking capacity at voltage			
	440V	Α	1850
	500V	Α	1600
	690V	Α	1480
Resistance per pole (average value)		mΩ	0.3
Power dissipation per pole (average value)		11132	0.0
Tower dissipation per pole (average value)	Ith	W	20.3
	AC-3	W	9.7
Tightening torque for terminals	A0-3	VV	9.1
rigitering torque for terminals	min	Nim	10
	min	Nm Nm	18 18
		Nm	
	max	[L.:	
	min	lbin	13.3
		lbin Ibin	13.3
Tightening torque for coil terminal	min max	lbin	13.3
Tightening torque for coil terminal	min max min	Ibin Nm	13.3
Tightening torque for coil terminal	min max min max	Nm Nm	13.3 1 1
Tightening torque for coil terminal	min max min	Nm Nm Ibin	13.3 1 1 0.74
Tightening torque for coil terminal	min max min max	Nm Nm	13.3 1 1 0.74 0.74
	min max min max min	Nm Nm Ibin	13.3 1 1 0.74
Max number of wires simultaneously connectable	min max min max min	Nm Nm Ibin Ibin	13.3 1 1 0.74 0.74
Tightening torque for coil terminal Max number of wires simultaneously connectable Conductor section AWG/Kcmil	min max min max min	Nm Nm Ibin Ibin	13.3 1 1 0.74 0.74
Max number of wires simultaneously connectable Conductor section	min max min max min	Nm Nm Ibin Ibin	13.3 1 1 0.74 0.74



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 275A, AC/DC COIL, 440...480VAC/DC

Operating position

Operating position		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Weight			g	6320
Conductor section				
AWG/kcmil condu	uctor section			
		max		300 kcmil
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	1000000
Safety related data				
Performance level B10d according to EN	I/ISO 13489-1			
		rated load	cycles	1000000
		mechanical load	cycles	10000000
Mirror contats according to IEC/EN 60947	74-4-1			yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz				
		min	V	440
		max	V	415
AC operating voltage				
of 50/60Hz coil po				
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	60
of 50/60Hz coil po				
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	60
of 60Hz coil powe				
	pick-up	_	04::	
		min	%Us	80
		max	%Us	110
	drop-out		0/17	00
		min	%Us	20
		max	%Us	60
AC average coil consumption at 20°C	1 . = 01.1			
of 50/60Hz coil po	owered at 50Hz			
		in-rush	VA	300
		holding	VA	10
-f F0/0011 "	owered at 60Hz			
of 50/60Hz coil p		in-rush	VA	300
of 50/60Hz coil p				
of 50/60Hz coil policy of 50/60Hz coil polic		holding	VA W	10

DC rated control voltage





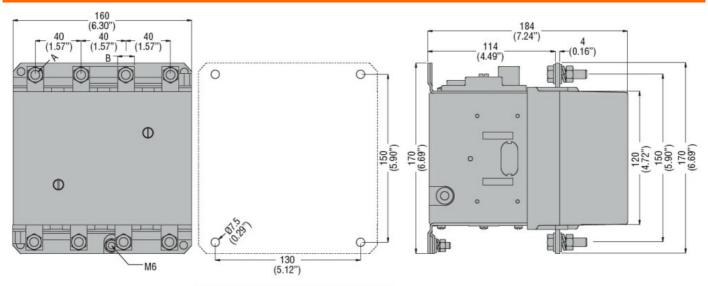
FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 275A, AC/DC COIL, 440...480VAC/DC

			min	V	440
			max	V	415
DC operating voltage					
	pick-up				
			min	%Us	80
			max	%Us	110
	drop-out				
			min	%Us	20
			max	%Us	60
Average coil consump	tion ≤20°C				
J			in-rush	W	300
			holding	W	10
Max cycles frequency					
Mechanical operation				cycles/h	2400
Operating times				- J	
Average time for Us co	ontrol				
	in AC				
		Closing NO			
		2.309 110	min	ms	60
			max	ms	100
		Opening NO	παλ	1113	
		Opening 110	min	ms	25
			max	ms	60
	in DC		тах	1110	
	111 00	Closing NO			
		Olosing 140	min	ms	60
			max	ms	100
		Opening NO	IIIdX	1113	100
		Opening NO	min	ms	25
			max	ms	60
UL technical data			IIIdx	1113	
Full-load current (FLA)	for three-phase AC	motor			
Tull-load culterit (TEA)	nor unee-phase Ao	THOLOI	at 480V	Α	180
			at 400 V	A	144
Yielded mechanical pe	rformanco		at 000 v		144
noided inechanical pe	for three-phase A	^ motor			
	ioi iiiiee-piiase At	o motor	200/208V	HP	60
			200/208V 220/230V	HP	75
			575/600V	пг HP	150
General USE			373/0007	1.115	130
Ochiciai USE	Contactor				
	Contactor		AC 011mm0 == 1	۸	275
Chart aircuit protection	fuee 600V		AC current	Α	210
Short-circuit protection					
	Standard fault		Object allegable and the	Ι. Λ	40
			Short circuit current	kA ^	10
			Fuse rating	Α	500 DK5
A mala i a material manaditi m			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating tempera	ature		2.2	5 0
			min	°C	-50
			max	°C	70
	Storage temperatu	ure			
			min	°C	-60

ENERGY AND AUTOMATION

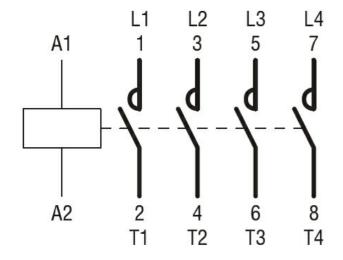
FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 275A, AC/DC COIL, 440...480VAC/DC

	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
Dimonsions			



CONTACTOR TYPE	Α	В
B115	M6	15 (0.59")
B145	M8	20 (0.79")
B180	M8	20 (0.79")

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus



ENERGY AND AUTOMATION

11B180400440

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 275A, AC/DC COIL, 440...480VAC/DC

EAC

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching