



			10 10 10
Product designation Product type designation			Power contactor BF65
Contact characteristics			D1 00
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
oporational inequality	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	100
Operational current le			
operational surrent to	AC-1 (≤40°C)	Α	100
	AC-1 (≤55°C)	A	80
	AC-1 (≤70°C)	Α	70
	AC-3 (≤440V ≤55°C)	A	65
	AC-4 (400V)	A	31
Rated operational power AC-3 (T≤55°C)	710 1 (1001)		
Talou opolalional power 7.0 0 (1-00 0)	230V	kW	18.5
	400V	kW	30
	415V	kW	37
	440V	kW	37
	500V	kW	37
	690V	kW	45
	1000V	kW	30
Rated operational current AC-3 (T≤55°C)	10001		
rated sperational current res s (1=00 °C)	230V	Α	65
	400V	Α	65
	415V	A	65
	440V	Α	65
	500V	Α	53
	690V	Α	47
	1000V	Α	25
Rated operational power AC-1 (T≤40°C)			
Tallou operational perior, i.e., i.e., o,	230V	kW	38
	400V	kW	65
	500V	kW	82
	690V	kW	114
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series		KVV	117
120 max surrout to in 201 with 2112 mile with 1 polos in series	≤24V	Α	50
	48V	A	50
	75V	A	50
	110V	A	8
	220V	A	-
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	2201		_ -
TEO MAX SUITERLIE III DOT WILL LITT = THIS WILL 2 POICS III SCHES	≤24V	Α	70
	≥24 V	^	10



	48V	Α	70
	75V	Α	70
	110V	Α	60
	220V	Α	9
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			_
·	≤24V	Α	70
	48V	Α	70
	75V	Α	70
	110V	Α	60
	220V	Α	90
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
'	≤24V	Α	70
	48V	Α	70
	75V	Α	70
	110V	Α	70
	220V	Α	110
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
TEO Max cancilla in Boo Boo Mar Erra Tomo Mar 1 poloc in conco	≤24V	Α	35
	48V	A	25
	75V	A	25
	110V	A	3
	220V	A	- -
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
TEC max current le in DC3-DC3 with L/N = 13ms with 2 poles in series	≤24V	۸	45
	≤24V 48V	A	45
		A	40
	75V	A	40
	110V	A	30
IFO	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	10.43.7		
	≤24V	A	55
	48V	A	50
	75V	A	50
	110V	Α	35
150 DOS DOS 111 L/D 145 111 4 1 1 1	220V	Α	52
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series		_	
	≤24V	Α	60
	48V	Α	60
	75V	Α	60
	110V	Α	50
	220V	A	65
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	125
	aM (IEC)	Α	80
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
	440V	Α	520
	500V	Α	425
	690V	Α	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
· · · · · · · · · · · · · · · · · · ·	Ith	W	8
	AC-3	W	3.4
Tightening torque for terminals			



		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for o	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires s	simultaneously connectable		Nr.	2
Conductor section	•			
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	Tioxibio W/o lag conductor coction	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	Παλ	111111	
	Flexible C/W lug colludctor section	min	mm²	1.5
		min		35
Davis a tamaia al musta a	tion	max	mm²	
	tion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	1020
Canduator acation				
Conductor section				
Conductor Section	AWG/kcmil conductor section			
Conductor section	AWG/kcmil conductor section	max		2
Operations Operations	AWG/kcmil conductor section	max		2
	AWG/kcmil conductor section	max	cycles	15000000
Operations	AWG/kcmil conductor section	max	cycles cycles	
Operations Mechanical life	AWG/kcmil conductor section	max		15000000
Operations Mechanical life Electrical life Safety related data		max		15000000
Operations Mechanical life Electrical life Safety related data	AWG/kcmil conductor section Od according to EN/ISO 13489-1		cycles	15000000 1400000
Operations Mechanical life Electrical life Safety related data		rated load	cycles	15000000 1400000 1400000
Operations Mechanical life Electrical life Safety related data Performance level B10	0d according to EN/ISO 13489-1		cycles	15000000 1400000 1400000 15000000
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats according		rated load	cycles	15000000 1400000 1400000 15000000 yes
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats according EMC compatibility	0d according to EN/ISO 13489-1	rated load	cycles	15000000 1400000 1400000 15000000
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating	0d according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1	rated load	cycles cycles cycles	15000000 1400000 1400000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	0d according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1	rated load	cycles	15000000 1400000 1400000 15000000 yes
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating	0d according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz	rated load	cycles cycles cycles	15000000 1400000 1400000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	Od according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz	rated load	cycles cycles cycles	15000000 1400000 1400000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	0d according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz	rated load mechanical load	cycles cycles cycles	15000000 1400000 1400000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	Od according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz	rated load mechanical load min	cycles cycles cycles	15000000 1400000 1400000 150000000 yes yes 400
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	od according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up	rated load mechanical load	cycles cycles cycles	15000000 1400000 1400000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	Od according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz	rated load mechanical load min max	cycles cycles cycles	15000000 1400000 1400000 15000000 yes yes 400
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	od according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up	rated load mechanical load min max min	cycles cycles cycles V %Us %Us %Us	15000000 1400000 1400000 15000000 yes yes 400
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	Od according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	rated load mechanical load min max	cycles cycles cycles	15000000 1400000 1400000 15000000 yes yes 400
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	Od according to EN/ISO 13489-1 Ing to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	rated load mechanical load min max min	cycles cycles cycles V %Us %Us %Us	15000000 1400000 1400000 15000000 yes yes 400
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	Od according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	rated load mechanical load min max min	cycles cycles cycles V %Us %Us %Us %Us %Us	15000000 1400000 1400000 15000000 yes yes 400 80 110 20 55
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	Od according to EN/ISO 13489-1 Ing to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	rated load mechanical load min max min	cycles cycles cycles V %Us %Us %Us	15000000 1400000 1400000 15000000 yes yes 400
Operations Mechanical life Electrical life Safety related data Performance level B10 Mirror contats accordin EMC compatibility AC coil operating Rated AC voltage at 5	Od according to EN/ISO 13489-1 Ing to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	rated load mechanical load min max min max	cycles cycles cycles V %Us %Us %Us %Us %Us	15000000 1400000 1400000 15000000 yes yes 400 80 110 20 55



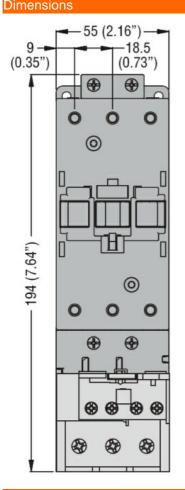
	drop-out			
	·	min	%Us	40
		max	%Us	55
AC average coil consu	umption at 20°C			
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz			
		in-rush	VA	210
		holding	VA	15
Dissipation at holding	≤20°C 50Hz		W	5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co				
	in AC			
	Closing NO			4.0
		min	ms	12
		max	ms	28
	Opening NO			
		min	ms	8
	. 50	max	ms	22
	in DC			
	Closing NO	i		40
		min	ms	40
	Opening NO	max	ms	85
	Opening NO	min	mc	20
		max	ms ms	55
UL technical data		IIIax	1113	33
) for three-phase AC motor			
i dii-load culterit (i LA)	i for three-phase Ao motor	at 480V	Α	65
		at 600V	A	62
Yielded mechanical pe	erformance	ut 000 v		02
riolada ilidalianida pe	for three-phase AC motor			
		200/208V	HP	20
		220/230V	HP	25
		460/480V	HP	50
		575/600V	HP	60
General USE				
	Contactor			
		AC current	Α	100
Short-circuit protection	n fuse, 600V	· ·		
•	High fault			
	5	Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	200
		Fuse class		RK5

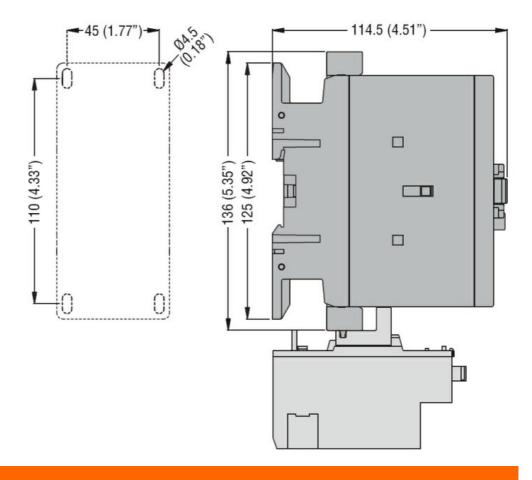


ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC COIL 50/60HZ,

Ambient conditions	l			
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Prote	ction			
Pollution degree				3
Dimensions				

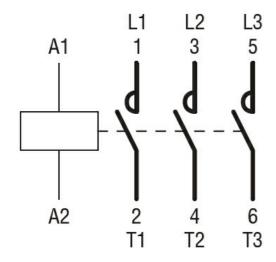




Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC COIL 50/60HZ,



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching