

# THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 115A, AC COIL 50/60HZ, 48VAC



Product designation Power contactor Product type designation BF115

Product type designation			ргио
Contact characteristics			
Number of poles		Nr.	3
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	160
Operational current le			
	AC-1 (≤40°C)	Α	160
	AC-1 (≤55°C)	Α	130
	AC-1 (≤70°C)	Α	115
	AC-3 (≤440V ≤55°C)	Α	115
	AC-4 (400V)	Α	54
Rated operational power AC-3 (T≤55°C)			
	230V	kW	37
	400V	kW	55
	415V	kW	55
	440V	kW	55
	500V	kW	75
	690V	kW	110
	1000V	kW	55
Rated operational current AC-3 (T≤55°C)			
	230V	Α	115
	400V	Α	115
	415V	Α	115
	440V	Α	115
	500V	Α	106
	690V	Α	106
	1000V	A	39
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	160
	48V	Α	160
	75V	Α	120
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	160
	48V	Α	160
	75V	Α	160
	110V	Α	130
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	220V	A	14



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48V
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
110V   A   140   220V   A   145
EC max current le in DC1 with L/R ≤ 1ms with 4 poles in series   ≤24V
Section   IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series   Section   Section
220V A 160   IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series   ≤24V A 160   48V A 50   75V A 40
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series  ≤24V A 160 48V A 50 75V A 40
≤24V A 160 48V A 50 75V A 40
48V A 50 75V A 40
75V A 40
110V A 6
220V A –
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series
≤24V A 160
48V A 72
75V A 65
110V A 65
220V A 7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series
≤24V A 160
48V A 150
75V A 100
110V A 100
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series
≤24V A 160
48V A 120
75V A 120
75V A 120 110V A 125
75V A 120 110V A 125 220V A 115
75V A 120   110V A 125   220V A 115   Short-time allowable current for 10s (IEC/EN60947-1)   A 920
75V A 120   110V A 125   220V A 115   Short-time allowable current for 10s (IEC/EN60947-1)   A 920   Protection fuse
75V A 120   110V A 125   220V A 115   Short-time allowable current for 10s (IEC/EN60947-1)
75V   A   120   110V   A   125   220V   A   115
75V   A   120   110V   A   125   220V   A   115
75V A 120
75V A 120
T5V   A   120   110V   A   125   220V   A   115   Short-time allowable current for 10s (IEC/EN60947-1)   A   920   Protection fuse   gG (IEC)   A   200   aM (IEC)   A   125   Making capacity (RMS value)   A   1500   Breaking capacity at voltage   440V   A   1200   500V   A   850   Source   A   1500   A   1200   A
T5V A 120
T5V   A   120
T5V A 120
T5V   A   120
T5V
75V   A   120   110V   A   125   220V   A   115   220V   A   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   200   2
T5V   A   120   110V   A   125   220V   A   115   220V   A   125   220V
T5V
T5V
T5V

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### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 115A, AC COIL 50/60HZ,

Tightening torque for o	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbin	0.59
		max	lbin	0.74
Conductor section				
	AWG/Kcmil			
		max		2/0
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	70
	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				M. d. L.
		normal		Vertical plan
		allowable		±30°
ixing				Screw / DIN rail 35mm
Noight			~	2020
Weight			g	2020
Operations  Mechanical life			ovoloo	15000000
Electrical life			cycles	
			cycles	1200000
Safety related data	0d coording to FN/ISO 12490 1			
Penomiance level bi	0d according to EN/ISO 13489-1	roted load	ovoloo	1200000
		rated load	cycles	
AC coil operating		mechanical load	cycles	1500000
	50/60Hz		cycles	15000000
Rated AC voltage at 5	50/60Hz		-	
Rated AC voltage at 5			cycles	15000000
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz		cycles	15000000
Rated AC voltage at 5		mechanical load	V	15000000 48
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	mechanical load	v V	15000000 48 80
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	mechanical load	V	15000000 48
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	mechanical load  min max	V %Us %Us	15000000 48 80 110
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	mechanical load  min max  min	v V %Us %Us %Us	15000000 48 80 110 20
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load  min max	V %Us %Us	15000000 48 80 110
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz	mechanical load  min max  min	v V %Us %Us %Us	15000000 48 80 110 20
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load  min max  min max	v Wus %Us %Us %Us %Us	15000000 48 80 110 20 55
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz	mechanical load  min max  min max	v V %Us %Us %Us %Us	15000000 48 80 110 20 55
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up	mechanical load  min max  min max	v Wus %Us %Us %Us %Us	15000000 48 80 110 20 55
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz	mechanical load  min max  min max  min max	v Wus %Us %Us %Us %Us %Us %Us	15000000 48 80 110 20 55 85 110
Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up	mechanical load  min max  min max  min max  min max	%Us %Us %Us %Us %Us	15000000 48 80 110 20 55 85 110 40
Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out	mechanical load  min max  min max  min max	v Wus %Us %Us %Us %Us %Us %Us	15000000 48 80 110 20 55 85 110
AC coil operating Rated AC voltage at 5 AC operating voltage AC average coil consi	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out	mechanical load  min max  min max  min max  min max	vV  %Us %Us %Us %Us %Us %Us	15000000 48 80 110 20 55 85 110 40
Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out	mechanical load  min max  min max  min max  min max	vV  %Us %Us %Us %Us %Us %Us %Us %Us	15000000 48 80 110 20 55 85 110 40 55
Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out	mechanical load  min max  min max  min max  min max  in-rush	V  WUS WUS WUS WUS  WUS VA	15000000 48 80 110 20 55 85 110 40 55
Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out  umption at 20°C of 50/60Hz coil powered at 50Hz	mechanical load  min max  min max  min max  min max	vV  %Us %Us %Us %Us %Us %Us %Us %Us	15000000 48 80 110 20 55 85 110 40 55
Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out	mechanical load  min max  min max  min max  in-rush holding	V  %Us %Us %Us %Us %Us %Us VA VA	15000000 48 80 110 20 55 85 110 40 55 300 20
Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out  umption at 20°C of 50/60Hz coil powered at 50Hz	mechanical load  min max  min max  min max  min max  in-rush	V  WUS WUS WUS WUS  WUS VA	15000000 48 80 110 20 55 85 110 40 55



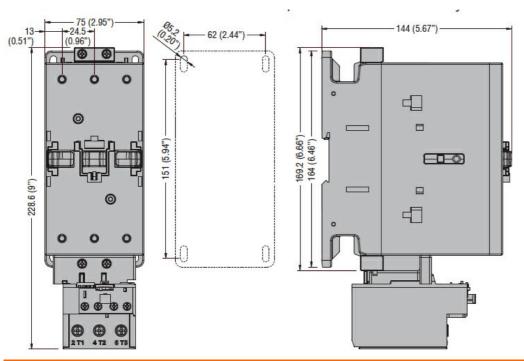


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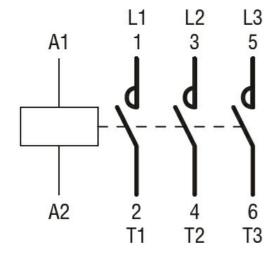
			in-rush	VA	300
Max cycles frequency			holding	VA	20
Mechanical operation				cycles/h	1500
Operating times				ey electri	1000
Average time for Us co	ntrol				
	in AC				
		Closing NO			
			min	ms	16
		Opening NO	max	ms	32
		Opening NO	min	ms	9
			max	ms	24
UL technical data					
Rated operational volta	ge AC (UL)			V	600
Yielded mechanical per					
	for three-phase AC mo	otor			
			200/208V	HP	40
			220/230V 460/480V	HP HP	40 75
			575/600V	HP	100
General USE			010,000 1		100
	Contactor				
			AC current	Α	165
Short-circuit protection					
	High fault				
			Short circuit current	kA	100
			Fuse rating Fuse class	Α	200 J
	Standard fault		ruse class		J
	Canada adit		Short circuit current	kA	10
			Fuse rating	Α	250
			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating temperature		p. t.	°C	50
			min max	°C	-50 70
	Storage temperature		IIIdX		10
	C.orago tomporataro		min	°C	-60
			max	°C	+80
Max altitude				m	3000
Dimensions					

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#### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 115A, AC COIL 50/60HZ,



#### Wiring diagrams



#### 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