

Description

Bussmann series UL 98 and UL 489 fused disconnect switches “break” and “make” power circuits ON and OFF load.

The switches employ double break contacts per pole that help ensure complete isolation of the fuse when the switch is in the “OFF” position.

Features

- Make and break power under load
- Double break by pole
- DIN-Rail or panel mount (30-100A)
- Up to 200kA short-circuit current rating
- Finger-safe covers
- Compact footprints available
- Defeatable handles automatically re-latch when the panel door is closed
- Most disconnect switches are front, right side, flange or direct handle operable
- NFPA 79 compliant handle kits

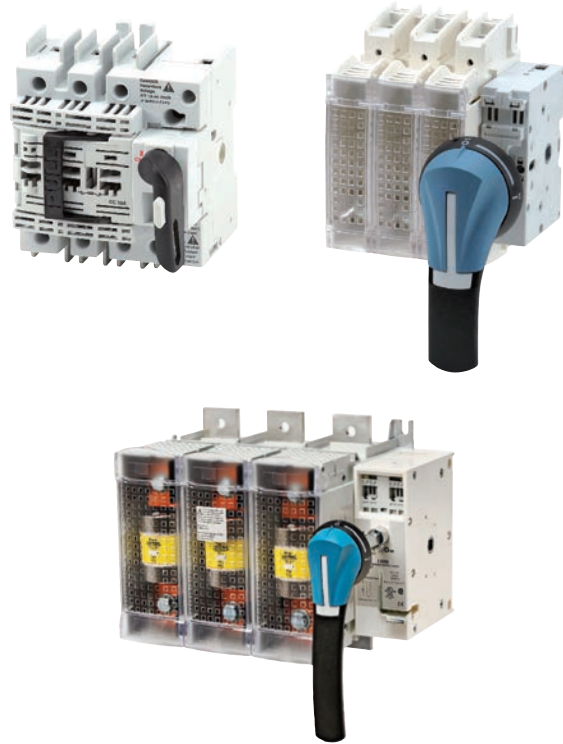
Agency information

- UL 98, Guide WHTY, File E155130
- UL 489, Guide WJAZ, File E359801
- CSA 22.2 No. 4, File 257020
- Conforms with IEC 60947-3
- NFPA 79 (2002 Edition)

Online resources

Visit www.cooperbussmann.com/Disconnects for:

- CAD drawings
- Instruction sheets
- UL information



QuikShip 
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QuikShip Everyday Service ships the most common part numbers within 24 hours. Contact your Eaton representative for details.

Available Bussmann series fuses

Class	Type	Data Sheet #
CC	LP-CC time-delay, current limiting	1023
CC	FNQ-R time-delay	1014
CC	KTK-R fast-acting	1015
J	LPJ time-delay, current limiting	1006 (0-60A)
J		1007 (70-600A)
J	JKS fast-acting fuses	1026 (0-60A)
J		1027 (70-600A)
J	DFJ high speed drive fuse	1048 (0-600A)
L	KRP-C time-delay, current limiting	1008
L	KTU fast-acting	1010
L	KLU time-delay	1013

UL 98 fused rotary disconnect switches—30 to 800A

Disconnect switches

UL electrical specifications											
Part number		—	—	RDF30J-2	RDF60J-2-COMP	RDF60J-2	RDF100J-2	RDF200J-2	RDF400J-2	RDF600J-2	RDF800L-2
2-pole		—	—	RDF30J-3	RDF60J-3-COMP	RDF60J-3	RDF100J-3	RDF200J-3	RDF400J-3	RDF600J-3	RDF800L-3
3-pole		RDF30CC-3	RDF30J-3-COMP	—	—	—	—	—	—	—	—
3-pole + neutral		RDF30CC-3N	RDF30J-3N-COMP	—	—	—	—	—	—	—	—
4-pole		—	—	RDF30J-4	RDF60J-4-COMP	RDF60J-4	RDF100J-4	RDF200J-4	RDF400J-4	RDF600J-4	RDF800L-4
UL standard		UL 489	UL 489	UL 98	UL 98	UL 98	UL 98	UL 98	UL 98	UL 98	UL 98
Fuse class		CC	J	J	J	J	J	J	J	J	L
Max fuse/ampacity		30	30	30	60	60	100	200	400	600	800
Switch type		Compact	Compact	Standard	Compact	Standard	Standard	Standard	Standard	Standard	Standard
Handle operation		Front	Front	Front/Side	Front/Side	Front/Side	Front/Side	Front/Side	Front/Side	Front	Front
UL electrical ratings											
Max AC volts		600Vac	600Vac	600Vac	600Vac	600Vac	600Vac	600Vac	600Vac	600Vac	600Vac
Max DC volts*		—	—	250Vdc	250Vdc	250Vdc	250Vdc	—	250Vdc	600Vdc	600Vdc
Std AC horsepower ratings											
1-phase, 240Vac		—	—	3	10	10	10	10	10	—	—
3-phase, 240Vac		3	3	3	7.5	7.5	15	25	50	75	75
3-phase, 480Vac		5.0	5.0	5.0	15	15	25	50	100	150	200
3-phase, 600Vac		7.5	7.5	7.5	15	15	30	60	125	200	250
Max AC horsepower ratings											
3-phase, 240Vac		7.5	7.5	7.5	15	15	30	60	125	200	200
3-phase, 480Vac		15	15	15	30	30	60	125	250	400	500
3-phase, 600Vac		20	20	20	50	50	75	150	350	500	500
DC horsepower ratings											
125Vdc		—	—	3	5	5	7.5	—	20	—	—
250Vdc		—	—	5	10	10	20	—	50	—	—
Electrical characteristics											
SCCR		100kA	100kA	200kA	100kA	200kA	200kA	200kA	200kA	200kA	200kA
Terminal lugs/kits		Integral	Integral	Integral	Integral	Integral	Integral	•	•	•	•
Mounting torque - Lb-In (N•m)		—	—	—	—	—	—	160 (18)	310 (35)	310 (35)	310 (35)
Wire type		75°C Cu	75°C Cu	75°C Cu	75°C Cu	75°C Cu	75°C Cu	75°C Cu/Al	75°C Cu/Al	75°C Cu/Al	75°C Cu/Al
Wire range and Torque - Lb-In (N•m)											
Solid		#14-10	#14-10	#14-10	#14-10	#12-10	#12-10	—	—	—	—
Stranded		27 (3.1)	27 (3.1)	31 (3.5)	31 (3.5)	35.4 (4)	35.4 (4)	#6-300MCM	#4-600MCM	(2) #2-600MCM	(2) #2-600MCM
		27 (3.1)	27 (3.1)	31 (3.5)	31 (3.5)	35.4 (4)	35.4 (4)	275 (31)	550 (62)	375 (42.4)	375 (42.4)
									Dual 1/0-250MCM		
									550 (62)		
Mechanical characteristics											
Endurances/cycles		10,000	10,000	10,000	10,000	10,000	10,000	8000	6000	5000	5000
Physical characteristics											
Dimensions		See drawings on product pages									
Weight - Lbs (KG)											
2-pole		—	—	3.0 (1.3)	3.1 (1.4)	4.0 (1.8)	4.07 (1.8)	5.7 (2.6)	11.4 (5.2)	31.7 (14.4)	31.7 (14.4)
3-pole		1.3 (0.6)	1.4 (0.6)	3.8 (1.7)	4.1 (1.8)	5.3 (2.4)	5.3 (2.4)	7.8 (3.5)	16.6 (7.6)	44.2 (20.1)	44.2 (20.1)
3-pole + neutral		—	1.5 (0.7)	—	—	—	—	—	—	—	—
4-pole		—	—	4.7 (2.1)	4.8 (2.2)	X.X (2.9)	6.49 (2.9)	10.8 (4.9)	21.8 (9.9)	56.8 (25.8)	56.8 (25.8)
Environmental											
Operating temp. range		-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C
Flammability rating		UL 94-V0	UL 94-V0	UL 94-V0	UL 94-V0	UL 94-V0	UL 94-V0	UL 94-V0	UL 94-V0	UL 94-V0	UL 94-V0
Accessories											
Lug Kit		Integral	Integral	Integral	Integral	Integral	Integral	•	•	•	•
Handles											
Direct		•	•	•	•	•	•	•	•	•	•
Front selector		•	•	—	—	—	—	—	—	—	—
Front pistol		•	•	•	•	•	•	•	•	•	•
Side pistol		—	—	•	•	•	•	•	•	•	—
Flange											
Cable		—	—	•	•	•	•	•	—	—	—
Shaft		—	—	•	•	•	•	•	—	—	—
NFPA through door handle		•	•	•	•	•	•	•	•	•	•
Shafts c/s - mm		5x5	5x5	10x10	10x10	10x10	10x10	10x10	10x10	12X12	12X12
Terminal shrouds		Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	•	•	•	•
Auxiliary contacts											
(1) NO		•	•	•	•	•	•	•	•	•	•
(1) NC		•	•	•	•	•	•	•	•	•	•
AC ratings											
Volts		600	600	600	600	600	600	600	600	600	600
Amps		10	10	10	10	10	10	10	10	10	10

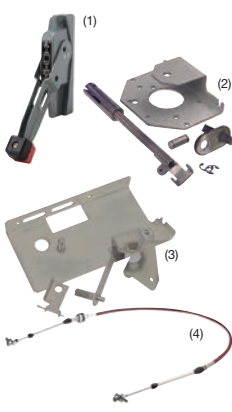
• Available, see product page for details and part numbers.
 — Not available.
 * General purpose only, not photovoltaic rated.

Standard Class J

For a complete assembly, please select:

SWITCH + LUGS		Switch										
		Amp rating	Fuse class	Number of poles	SCCR	Max horsepower rating						Part number
						1-phase 220/240Vac	220/240Vac	3-phase 440/480Vac	600 Vac	DC*		
		200	J	2	200kA	10	-	-	-	-	-	RDF200J-2
		200	J	3	200kA	-	60	125	150	-	-	RDF200J-3
		200	J	4	200kA	-	60	125	150	-	-	RDF200J-4
		400	J	2	200kA	10	-	-	-	20	50	RDF400J-2
		400	J	3	200kA	-	125	250	350	20	50	RDF400J-3
		400	J	4	200kA	-	125	250	350	20	50	RDF400J-4
		* DC ratings use two poles in series.										
HANDLE		Terminal lug kit										
		Switch amp rating	Number of poles	Lugs Per kit	Wire range				Wire type	Part number		
		200	2	2	#6-300MCM				75°C Cu/Al	LUG1-2		
		200	3	3	#6-300MCM				75°C Cu/Al	LUG1-3		
		200	4	4	#6-300MCM				75°C Cu/Al	LUG1-4		
		400	2	2	#4-600MCM or Dual 1/0-250MCM				75°C Cu/Al	LUG2-2		
		400	3	3	#4-600MCM or Dual 1/0-250MCM				75°C Cu/Al	LUG2-3		
		400	4	4	#4-600MCM or Dual 1/0-250MCM				75°C Cu/Al	LUG2-4		
		+										
			Direct mount handle - mounts directly to switch, no shaft required									
For switch Part number	Color		Test function	Padlockable						Part number		
All switches		Black	Y	Y						DIR-07		
or												
	External front operated pistol handles - shaft required											
	NEMA type	Color	Test function	Padlockable	Defeatable	Part number						
	1, 3R, 12	Black	N	Y	Y	H12-03B						
	1, 3R, 12	Red/yellow	N	Y	Y	H12-03R						
	1, 3R, 4, 4X, 12	Black	N	Y	Y	H4X-06B						
	1, 3R, 4, 4X, 12	Red/yellow	N	Y	Y	H4X-06R						
	1, 3R, 4, 4X, 12	Black	Y	Y	Y	H4X-06TB						
	1, 3R, 4, 4X, 12	Red/yellow	Y	Y	Y	H4X-06TR						
	or											
		Metallic hasp (heavy duty) external front operated pistol handles - shaft required										
NEMA type		Color	Test function	Padlockable	Defeatable	Part number						
1, 3R, 4, 4X, 12	Black	N	Y	Y	H4X-06BHD							
1, 3R, 4, 4X, 12	Red/yellow	N	Y	Y	H4X-06RHD							
or												
	External right side operated pistol handles - shaft required											
	NEMA type	Color	Test function	Padlockable	Defeatable	Part number						
1, 3R, 4, 4X, 12	Black	N	Y	N/A	H4X-06SB							
1, 3R, 4, 4X, 12	Red/yellow	N	Y	N/A	H4X-06SR							
+												
	Shafts for pistol handles											
	Length in (mm)	Mounting depth (X) in (mm)							Part number			
	7.9 (200)	200A: 5.70-9.06 (145-230) 400A: 7.87-10.24 (200-260)							SH5-200			
	12.6 (320)	200A: 5.70-13.78 (145-350) 400A: 7.87-16.93 (200-380)							SH5-320			
15.7 (400)	200A: 5.70-16.93 (145-430) 400A: 7.87-18.10 (200-460)							SH5-400				

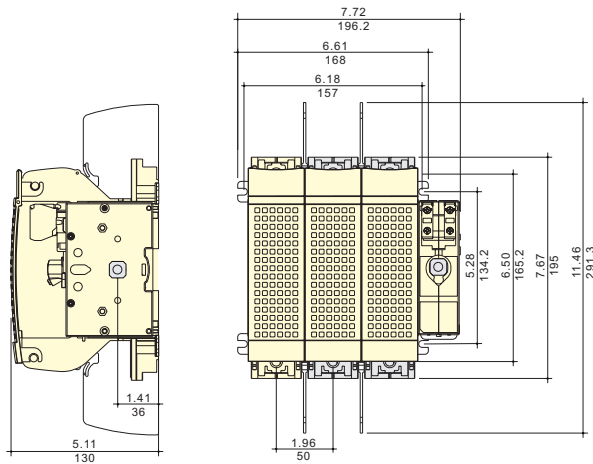
Standard Class J

Select for standard applications	Handle	OR										
			Flange handle⁽¹⁾ 200A only - requires shaft operated mechanism <i>or</i> cable operated mechanism + cable									
			NEMA type	Flange style	Test function	Padlockable	Defeatable	Part number				
			1, 3R, 4, 12	Standard	N	Y	Y	FLH1				
		1, 3R, 4, 4X, 12						Chrome plated	N	Y	Y	FLH2
		Shaft operated flange mechanism⁽²⁾ 200A only - includes shaft										
		For enclosure depth in (mm)					Part number					
		6~24 (152~613)					FLRM					
		Cable operated flange mechanism and cable 200A only - must select Mechanism ⁽³⁾ <i>and</i> Cable ⁽⁴⁾										
		Item					Part number					
Cable mechanism					FLCM							
36" (900mm) cable					FLC36							
60" (1500mm) cable					FLC60							
120" (3000mm) cable					FLC120							
OR												
Accessories	Aux contacts	NFPA through the door handle kit - to be used with front pistol handle										
		Use with switch	Color	Test function	Padlockable	Defeatable	Part number					
		RDF200J-__	Red	N	Y	N	H79-2					
RDF400J-__						Red	N	Y	N	H79-3		
and ...												
Accessories	Shrouds	Auxiliary contacts										
		Contact type	Number of contacts	Continuous amp rating	Voltage rating	Max number of aux contacts per switch part number	Part number					
		NO	1	10A	600Vac	RDF200J-__: 4	BAC05					
NC					RDF400J-__: 8	BAC06						
and ...												
Terminal shrouds - includes terminal shroud for Lineside or loadside												
Switch Amp rating	Number of poles					Part number						
200	2					TSH8-2TB						
200	3					TSH8-3TB						
200	4					TSH8-4TB						
400	2					TSH9-2TB						
400	3					TSH9-3TB						
400	4					TSH9-4TB						

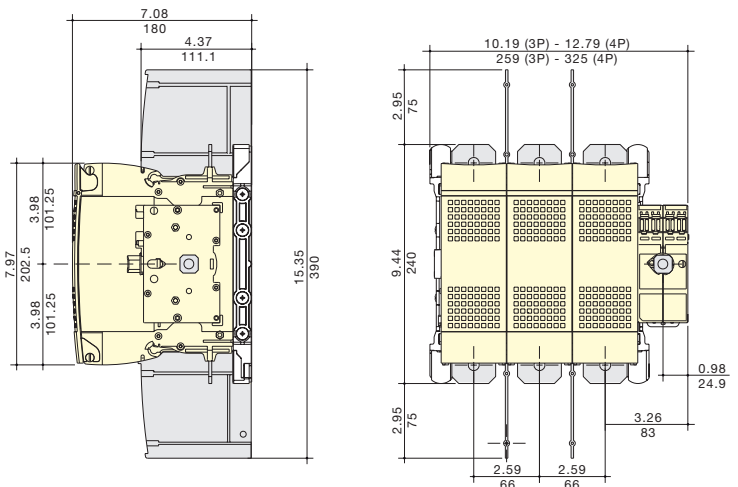
Disconnect switches

Dimensions – in (mm)

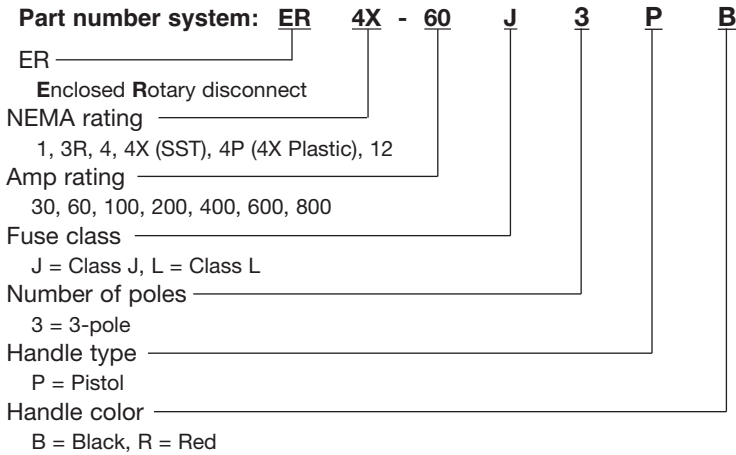
- RDF200J-3



- RDF400J-3



3-pole UL 98 600Vac



Part numbers - All part numbers provided with integral or installed lugs and a black selector handle. Order Red/yellow handle by changing the suffix “B” to “R.”

UL general purpose amp rating	Fuse type	NEMA enclosure type and part number					
		1	3R	4	4X plastic ⁽¹⁾	4X stainless	12
30	J	ER1-30J3PB	ER3R-30J3PB	ER4-30J3PB	ER4P-30J3PB	ER4X-30J3PB	ER12-30J3PB
60	J	ER1-60J3PB	ER3R-60J3PB	ER4-60J3PB	ER4P-60J3PB	ER4X-60J3PB	ER12-60J3PB
100	J	ER1-100J3PB	ER3R-100J3PB	ER4-100J3PB	ER4P-100J3PB	ER4X-100J3PB	ER12-100J3PB
200	J	ER1-200J3PB	ER3R-200J3PB	ER4-200J3PB	ER4P-200J3PB	ER4X-200J3PB	ER12-200J3PB
400	J	ER1-400J3PB	ER3R-400J3PB	ER4-400J3PB	ER4P-400J3PB	ER4X-400J3PB	ER12-400J3PB
600	J	ER1-600J3PB	ER3R-600J3PB	ER4-600J3PB	ER4P-600J3PB	ER4X-600J3PB	ER12-600J3PB
800	L	ER1-800L3PB	ER3R-800L3PB	ER4-800L3PB	ER4P-800L3PB	ER4X-800L3PB	ER12-800L3PB

(1) Enclosures ≤100A are polycarbonate, flammability rating UL 94-5VA-V0, ≥200A are fiberglass, flammability rating UL 94-5V.

Switch ratings - for wire types, ranges and tightening torques, see table on page 12-9

Switch amp Rating	Disconnect switch	Fuse type	No. of poles	Voltage		SCCR @ Vac	Max Hp rating @ 600Vac	
				Vac	Vdc			
30	RDF30J-3	J	3	600	250	200kA	20	
60	RDF60J-3	J					50	
100	RDF100J-3	J					75	
200	RDF200J-3	J					N/A	150
400	RDF400J-3	J					250	350
600	RDF600J-3	J					600	
800	RDF800L-3	L						

Disconnect switches