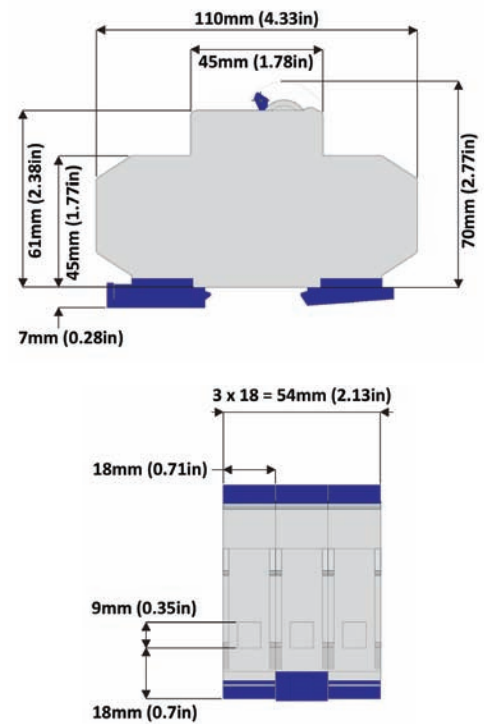


## Jtec 489 UL489 Branch Circuit Breaker



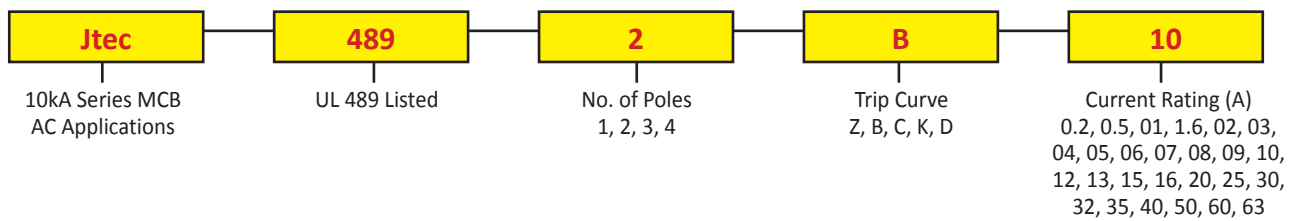
JTEC489 MCBs

10kA Miniature Circuit Breaker



The Jtec 489 range is UL 489 listed (File E255530). Available in trip curves Z (v. quick), B (quick), C (medium), K (motor) and D (long delay) in current ratings from 0.2 to 63A, and all available in 1, 2, 3 or 4 poles, Jtec 489 10kA MCBs offer maximum performance at excellent prices.

### Jtec 489 AC Ordering Scheme



## Jtec 489 DC Miniature Circuit Breaker

JTEC489 MCBs



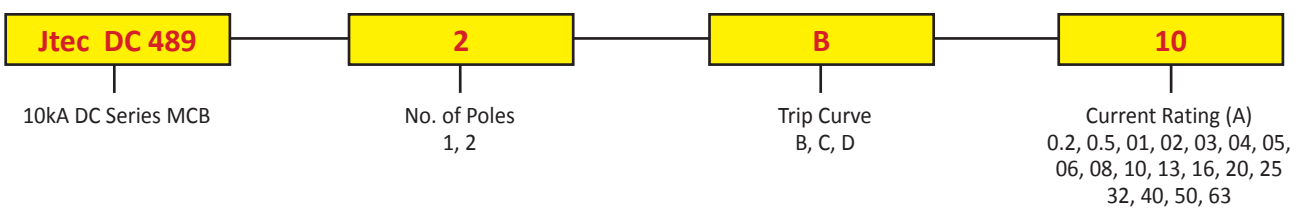
Jtec dc circuit breaker allows usage on dc circuits upto 125Vdc in a single pole and 250Vdc with two poles in series configuration.

The JtecDC device is polarity sensitive and must be wired correctly as per the examples to the right.

### Jtec 489 DC Technical Specification

Poles	Voltage	Breaking capacity
Single pole	125Vdc	10kA
Double pole in series	250Vdc	10kA

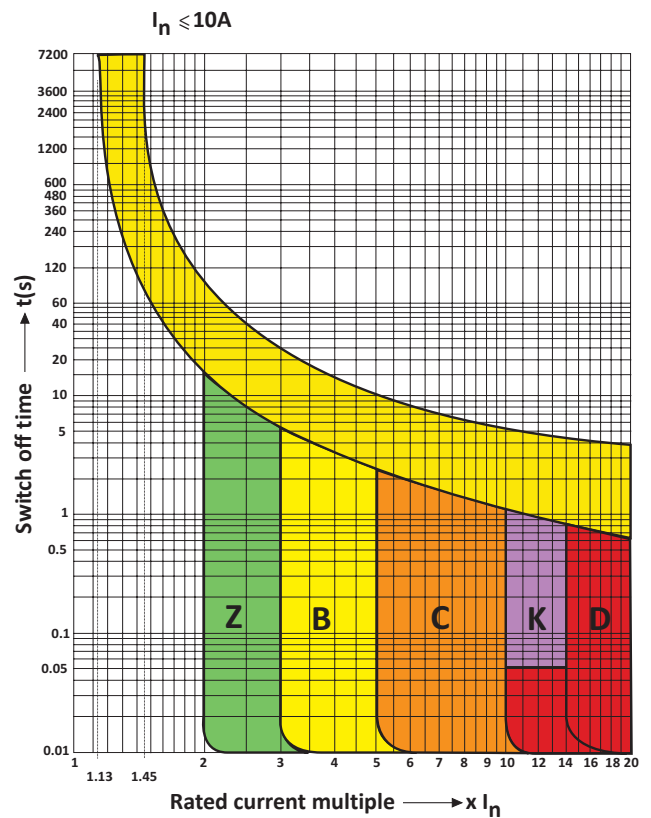
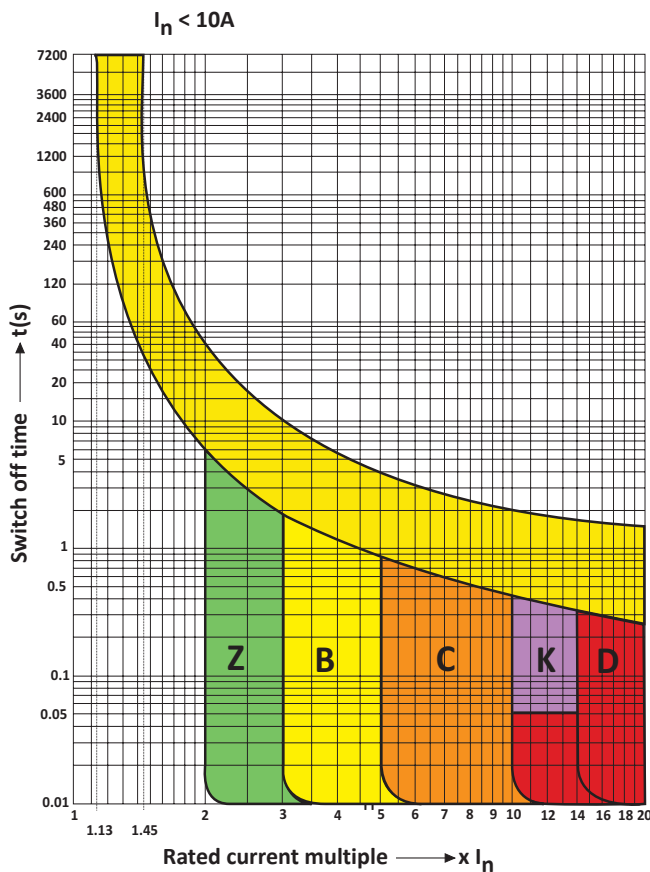
### Jtec 489 DC Ordering Scheme



AC	0.2 TO 32A	33 TO 63A
1 Pole	277 VAC, 10kA 240 VAC, 10kA 240/120 VAC, 10kA 120 VAC, 10kA	240 VAC, 10kA 240/120 VAC, 10kA 120 VAC, 10kA
2, 3, 4 Pole	480Y/277 VAC, 10kA 240/120 VAC, 10kA 120 VAC, 10kA	240 VAC, 10kA 240/120 VAC, 10kA 120 VAC, 10kA

DC	0.2 TO 63A
1 Pole	125 VDC, 10kA
2 Pole	250 VDC, 10kA

Use copper wire only 60C/75C | Line / Load reversible | HACR Type 40°C

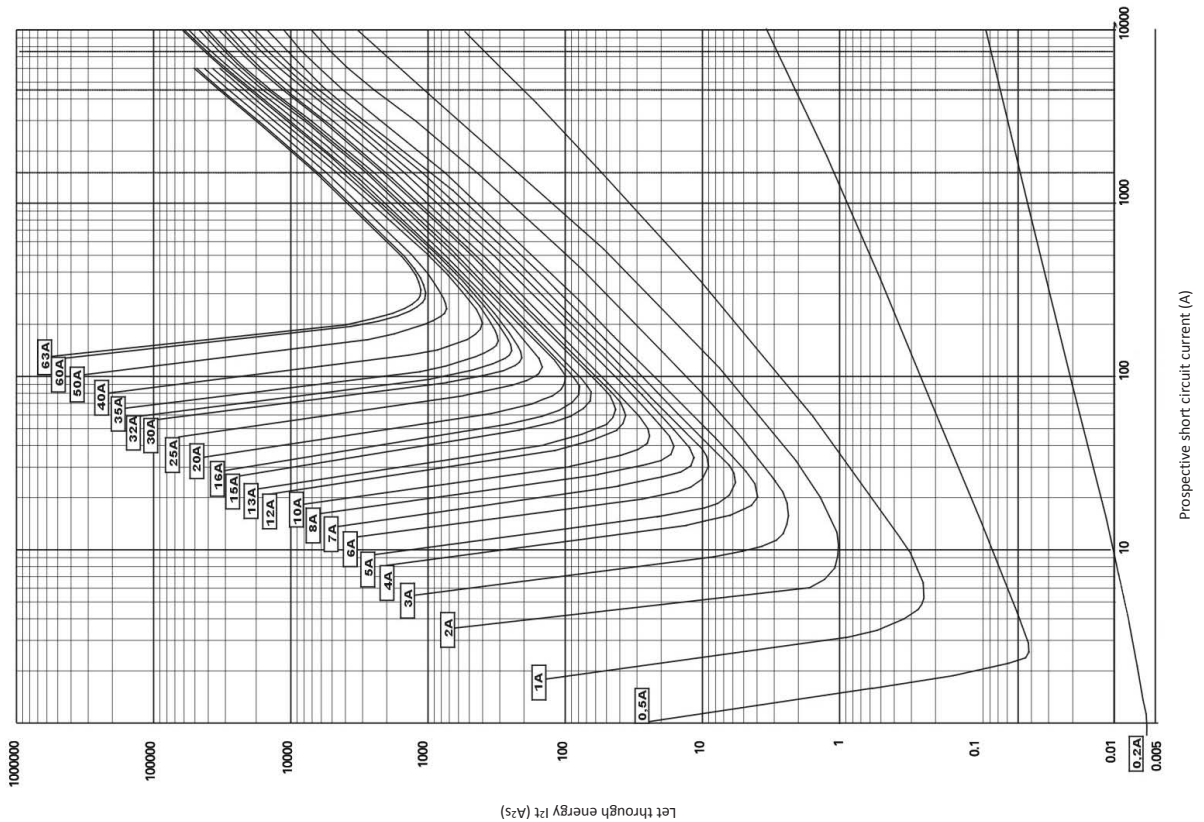


## Jtec 489 Technical Specification

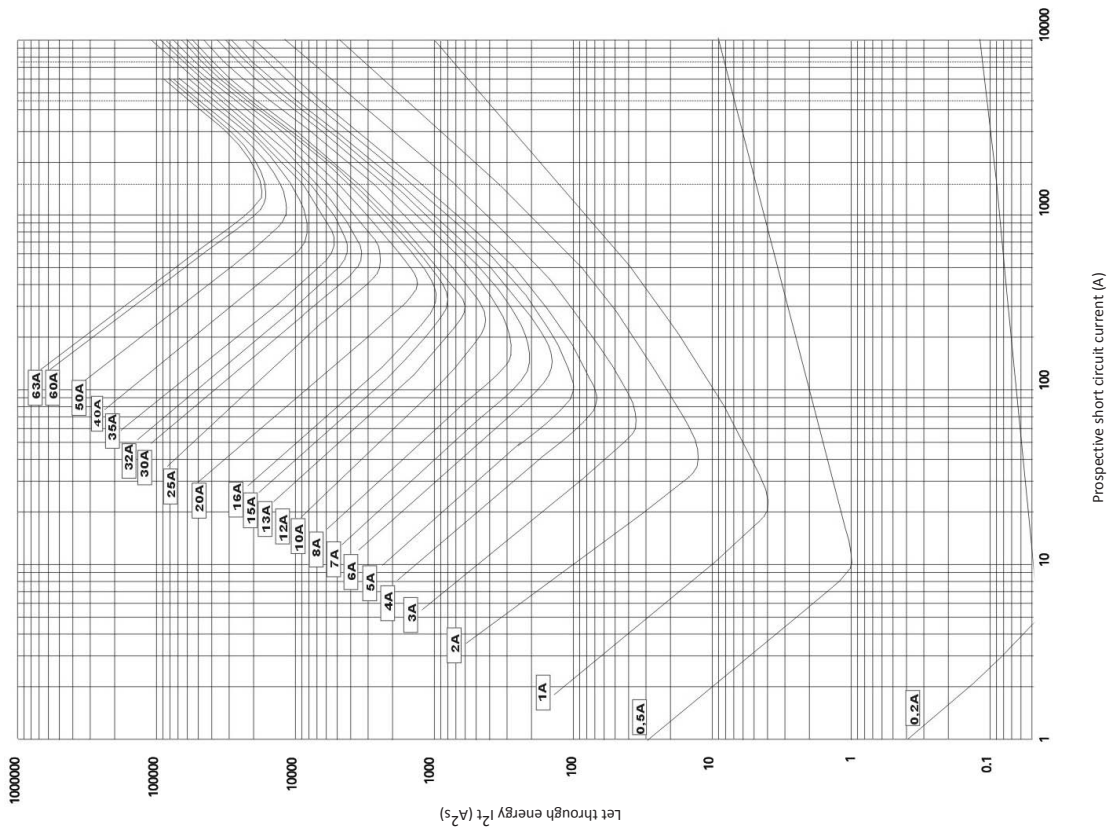
	AC MCBs
Current Ratings (A)	0.2, 0.5, 1, 1.6, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 20, 25, 30, 32, 35, 40, 50, 60, 63 (special current ratings available on request)
Number of Poles	1, 2, 3, 4, 1+N, 3+N
Trip Curves to EN 60898	B, C, K, D
Rated Voltage	230/400 Vac EN60898
	480Y/277 Vac (UL489, upto 32A)
	240 Vac (UL489, upto 63A)
Rated Frequency	50/60 Hz
Short Circuit Capacity acc. EN60898/60947-2	10kA
European Energy Limiting Class to EN60898	Class 3, B & C 0.2 A–40 A
UL Interrupt Rating	10kA
Electrical Life	6000 cycles on/off
Mechanical Life	100,000 cycles on/off
Protection Degree	IP20 at front
Ambient Temperature Range	-25°C to 60°C
Operational Position	In any plane
Compliance Standards	UL489, EN 60898/EN 60947-2
Vibration Resistance	3g (8-50Hz)
Resistance to Thermal Shocks	140°C
Connectable Cross Section	1mm <sup>2</sup> - 25mm <sup>2</sup> /AWG18 - AWG3
Tightening Torque	2.8Nm/25lb-in

Rated current I <sub>n</sub> (A)	Effective rated current allowing for ambient temperature I <sub>cor</sub> (A)									Internal impedance Z (mΩ) char. B, C, D, K	Power Loss B, C, D, K P (W)
	-20	-10	0	10	20	30	40	50	60		
0.2	0.24	0.24	0.23	0.22	0.21	0.2	0.19	0.18	0.17	45100.0	1.80
0.5	0.61	0.59	0.57	0.55	0.53	0.5	0.47	0.44	0.42	8000.0	2.00
1	1.21	1.18	1.14	1.1	1.05	1.0	0.93	0.88	0.83	2000.0	2.00
2	2.42	2.36	2.28	2.2	2.1	2.0	1.86	1.76	1.67	490.0	1.96
3	3.63	3.54	3.42	3.3	3.15	3.0	2.79	2.64	2.5	230.0	2.07
4	4.84	4.72	4.56	4.4	4.2	4.0	3.72	3.52	3.33	150.0	2.40
5	6.1	5.9	5.7	5.5	5.3	5.0	4.7	4.4	4.2	95.0	2.38
6	7.3	7.1	6.8	6.6	6.3	6.0	5.6	5.3	5.0	69.0	2.48
7	8.5	8.2	8.0	7.7	7.4	7.0	6.5	6.2	5.8	52.0	2.55
8	9.7	9.4	9.1	8.8	8.4	8.0	7.4	7.0	6.7	35.0	2.24
10	12.1	11.8	11.4	11.0	10.5	10.0	9.3	8.8	8.3	23.5	2.35
12	14.5	14.2	13.7	13.2	12.6	12.0	11.2	10.6	10.0	18.7	2.69
13	15.7	15.3	14.8	14.3	13.7	13.0	12.1	11.5	10.8	14.3	2.42
14	16.9	16.5	16.0	15.4	14.7	14.0	13.0	12.3	11.7	12.4	2.43
15	18.2	17.7	17.1	16.5	15.8	15.0	14.0	13.2	12.5	10.1	2.27
16	19.4	18.9	18.2	17.6	16.8	16.0	14.9	14.1	13.3	7.5	1.92
20	24.2	23.6	22.8	22.0	21.0	20.0	18.6	17.6	16.7	6.3	2.52
25	30.3	29.5	28.5	27.5	26.3	25.0	23.3	22.0	20.8	4.6	2.88
30	36.3	35.4	34.2	33.0	31.5	30.0	27.9	26.5	25.0	3.6	3.24
32	38.7	37.8	36.5	35.2	33.6	32.0	29.8	28.2	26.7	3.6	3.69
35	42.3	41.3	39.9	38.5	36.8	35.0	32.6	30.8	29.2	3.6	4.41
40	48.4	47.2	45.6	44.0	42.0	40.0	37.2	35.02	33.3	3.0	4.80
50	60.5	59.0	57.0	55.0	52.5	50.0	46.5	44.1	41.7	2.4	6.00
60	72.6	70.9	68.4	66.0	63.0	60.0	55.9	52.9	50.1	1.8	6.48

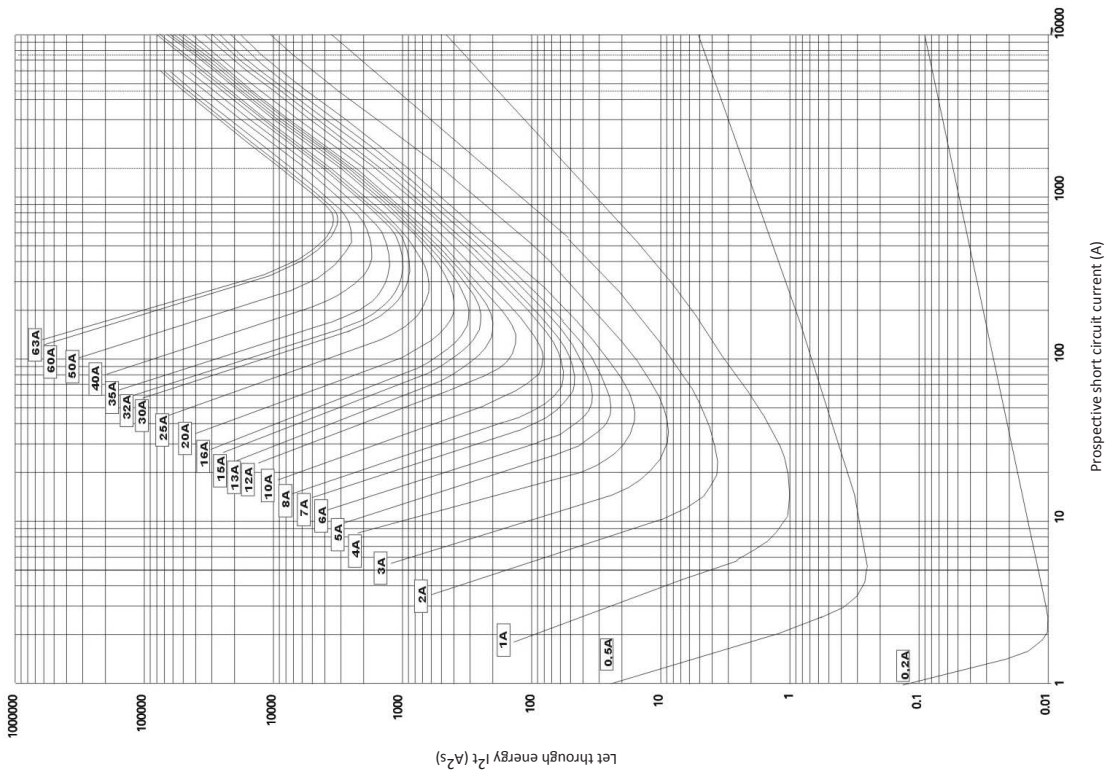
Let through energy I<sup>2</sup>t of Jtec 489 trip type B 277V



Let through energy  $I^2t$  of Jtec 489 trip type D, K 277V

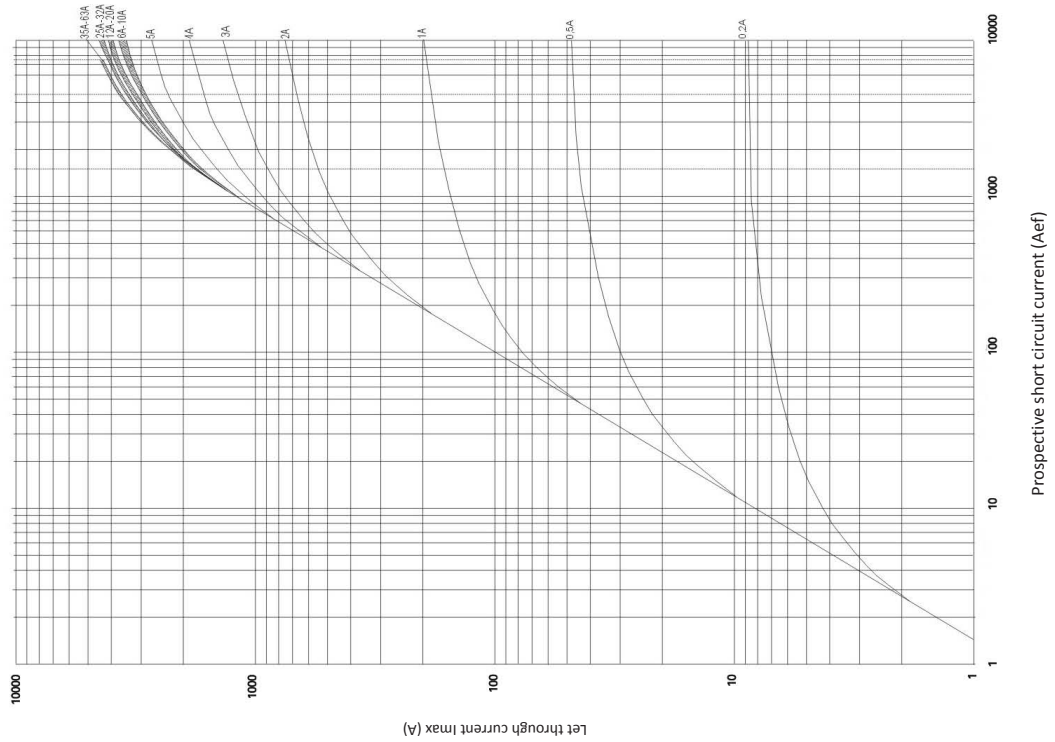


Let through energy  $I^2t$  of Jtec 489 trip type C 277V

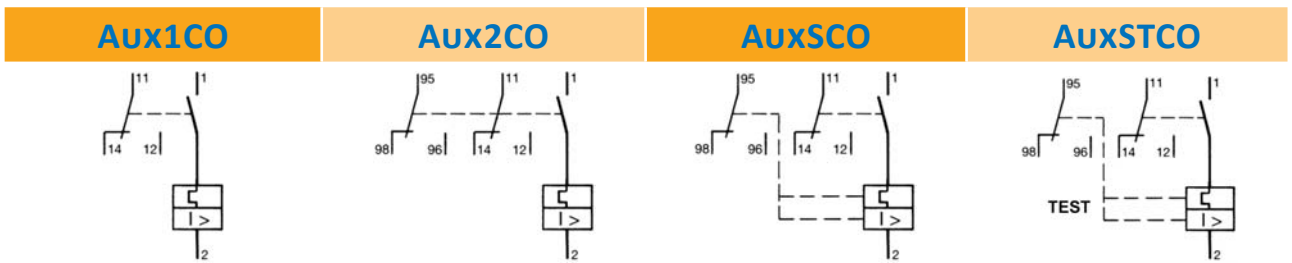




Peak short circuit let through current for Jtec 489 277V (Indicates current limiting ability of Jtec 489)



### Jtec 489 Accessories



Accessories	Cable (mm <sup>2</sup> )	Cable (AWG)	Torque (Nm)	Torque (lb-in)
Shunt Trip/Undervoltage Release	1 - 25	18 - 3	2.8	25
Neutral Pole	1 - 25	18 - 3	2.8	25
Auxiliary & Signal Contacts	0.5 - 2.5	20 - 12	0.5	4

Auxiliary Contacts Pilot Duty Rated (for Heavy Duty) - 120Vac 6A, 240Vac 3A

Accessories		Order Codes
Auxiliary and Signal contacts	1 Changeover Contact	Jtec489 AUX 1CO
	2 Changeover Contact	Jtec489 AUX 2CO
	1 Changeover + 1 Signal Changeover	Jtec489 AUX SCO
	1 Changeover + 1 Signal + Test Button	Jtec489 AUX STCO
N-Pole	Neutral Pole	Jtec489 N2
Lockon/Lockoff Adaptors	Black	Jtec489 LP1 Black
	Yellow	Jtec489 LP1 Yellow

Accessories		Shunt Trip	Undervoltage Release
AC	12Vac	Jtec489 ST 12AC	Jtec489 UV12AC
	24Vac	Jtec489 ST 24AC	Jtec489 UV24AC
	48Vac	Jtec489 ST 48AC	Jtec489 UV48AC
	60Vac	Jtec489 ST 60AC	Jtec489 UV60AC
	110Vac	Jtec489 ST 110AC	Jtec489 UV110AC
	120Vac	Jtec489 ST 120AC	Jtec489 UV120AC
	230Vac	Jtec489 ST 230AC	Jtec489 UV230AC
	277Vac	Jtec489 ST 277AC	Jtec489 UV277AC
	400Vac	Jtec489 ST 400AC	Jtec489 UV400AC
DC	12Vdc	Jtec489 ST 12DC	Jtec489 UV12DC
	24Vdc	Jtec489 ST 24DC	Jtec489 UV24DC
	48Vdc	Jtec489 ST 48DC	Jtec489 UV48DC
	110Vdc	Jtec489 ST 110DC	Jtec489 UV110DC

## Jtec Front Mount Adaptors

Techna's new front mount adaptors allow the easy front attachment of any of our Jtec/JtecUL/Jtec489 range of MCBS. Available in either 1, 2 and 3 pole. For more information please see page 23.

