

SUPPLEMENTARY PROTECTORS

WMS Series



- 1, 2, 3 Pole Models
- 1 to 30 Amp Ranges
- 3 Different Trip Curves to Choose From
- CSA 22.2



WMS1C20SP



WMS2C20SP



WMS3C20SP

All models shown smaller than actual size.

Offering maximum reliability and accuracy, the supplementary protectors fit various applications where a fuse may have been previously used. The advantage over fuses is that it is resettable and the device's status is easily and clearly identified by the position of the handle and the flag indicator. With easy mounting of the device on a 35 mm (1.38") DIN rail it is now easier for the customer to select and apply this modular range, due to the smaller modular width of the device and accessories. The WMS supplementary protector is a dual-rated product for both AC and DC supplies, in accordance with UL 1077, CSA 22.2 and IEC 898 standards and is marked with CE in accordance with the Low Voltage Directive. With this dual standard product, you can include it within your design, knowing that, in the vast majority of cases wherever the equipment is used, the product is in line with the local UL, CSA or IEC (European) requirements. This is very important as the different areas of the world market draw closer together and the need for breakers that meet different standards is a common, everyday occurrence. It is to be applied in conjunction with a branch protector (if branch protection is required) and can be a replacement for

similarly applied fuses. In addition to this, you are able to select a device that provides maximum reliability and accuracy to fit their various applications (of which there are many) due to the availability of a wide range of current ratings from 0.5 to 60 amperes and three different overcurrent characteristic curves. With easy mounting of the device on a 35 mm (1.38") DIN-rail and also the "Quick 3 Step" field mountable accessories, it is

now easier to select and apply this modular range. In addition, utilizing the bus bar comb to connect multiple devices from a single power source, saves time as multiple wire connections are no longer required. Due to the smaller modular width of the device and accessories, it enables them to save space in their panel or equipment—which directly leads to cost savings!

IEC RATING

AMPERE RATING	CURVE	VOLTS AC	SHORT CIRCUIT CAPACITY	
			IEC 898, I _{CN}	IEC 947-2, I _{CU}
0.5 to 5	C, D	240/415	10,000	10,000
5 to 60	B, C, D	240/415	10,000	10,000

UL/CSA RATING

AMPERE RATING	NUMBER OF POLES	CURVE	VOLTS AC	SHORT CIRCUIT CAPACITY (A)	
				UL 1077	CSA 235
6 to 60	1	B	120	10,000	10,000
0.5 to 60	1	C, D	120	10,000	10,000
6 to 60	2, 3, 4	B	240	10,000	10,000
0.5 to 60	2, 3, 4	C, D	240	10,000	10,000
6 to 60	1	B	277	6000	6000
0.5 to 60	1	C, D	277	6000	6000
6 to 60	2, 3, 4	B	480	5000	5000
0.5 to 60	2, 3, 4	C, D	480	5000	5000

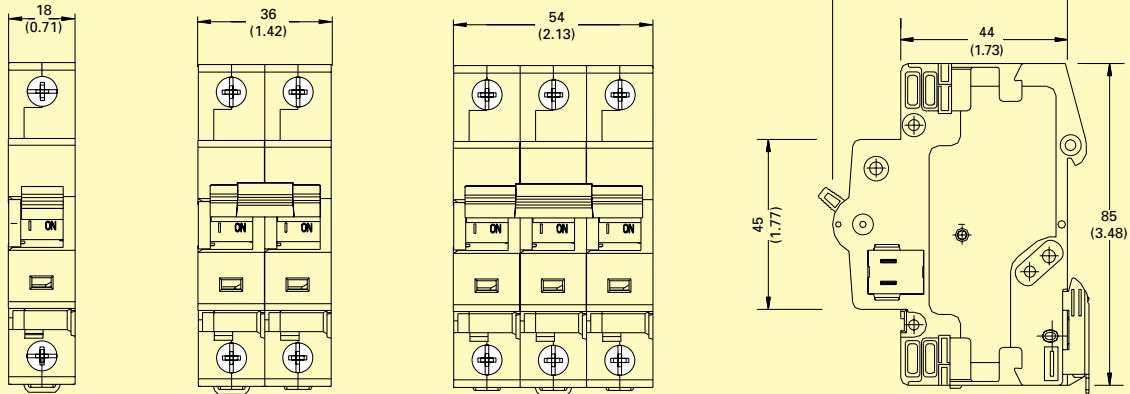
DC RATING

AMPERE RATING	NUMBER OF POLES	CURVE	VOLTS DC	SHORT CIRCUIT CAPACITY (A)	
				UL 1077	CSA 235
0.5 to 63	1	B, C, D	65	10,000	10,000
0.5 to 63	2	B, C, D	130	10,000	10,000

CABLE SIZE AND TORQUE SETTING - WMS SERIES

AMPERE RATING	CABLE SIZE		TIGHTENING TORQUE	
	mm ²	AWG	Nm	lb/in
0.5 to 60	1 to 25	14 to 6	2.8	24.8

Dimensions: mm (inch)



Standards and Certifications

- UL recognized under UL 1077
- CSA 22.2
- IEC 898
- IEC 60947-2

Product Description

- Dual standard breaker: recognized by UL and CSA under UL 1077 and CSA 22.2
- Third-party approved by KEMA according to IEC 898
- CE marked in accordance with Low Voltage Directive (LVD) (73/23/EEC)
- Used to provide overcurrent protection where branch protection (for example UL 489 MCCB) is already provided or not required
- Installed as a component within or part of an appliance or a piece of electrical equipment
- Ideal replacement for fuses that are applied as a supplementary protector, i.e., in addition to branch protection (if required)
- 35 mm (1.38") DIN-rail mountable, utilizing metallic "extra strength" spring clip

- Light gray case with gray handle, that is marked "O" for OFF and "I" for ON
- UL file number E162396
- CSA file number LR105508-2

Application Description

Cutler-Hammer supplementary protectors are ideal for providing protection in a multitude of applications, including:

- Motor control circuits
- Control power transformers
- Relays
- Contactor coils
- PLC I/O points
- Lighting circuits

Features, Benefits and Functions

- Current limiting design provides fast short circuit interruption that reduces the let-through energy which can damage the circuit.
- Thermal-magnetic overcurrent protection: Three levels, categorized by B, C and D curves in direct relation to continuous rating of device

-B Curve—3 to 5X: Suited for applications where maximum protection is required for control circuits from low level short circuit faults that could damage the wiring.

-C Curve—5 to 10X: Is positioned for medium inrush startup currents, to provide protection for small transformers, pilot devices, etc.

-D Curve—10 to 20X: Provides a magnetic range to allow for higher inrush levels during startup, that are usually seen with motors, transformers and other high inductive systems.

- Color-coded status indicator window—Red = ON or Green = OFF
- IP20 finger protection.
- Provision for dual connection—line and load:

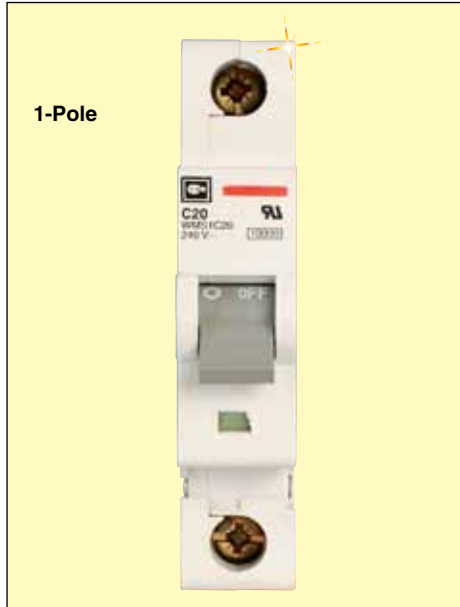
- Fork or pin bus bars
- Cable direct into terminal
- Cable utilizing ring tung connector

- 35 mm (1.38") DIN-rail mountable, utilizing "extra strength" spring clip

Field-Mountable Accessories

- Quick 3-step process
- No tools required
- Auxiliary switch
- Combined auxiliary switch and bell alarm
- Shunt trip

To Order



1-Pole

1-POLE			
AMPERE RATING	MODEL NO. CURVE B	MODEL NO. CURVE C	MODEL NO. CURVE D
1	N/A	WMS1C01SP	N/A
2		WMS1C02SP	WMS1D02SP
3		WMS1C03SP	WMS1D03SP
4		WMS1C04SP	WMS1D04SP
5		WMS1C05SP	WMS1D05SP
6	WMS1B06SP	WMS1C06SP	WMS1D06SP
7	WMS1B07SP	WMS1C07SP	WMS1D07SP
8	WMS1B08SP	WMS1C08SP	WMS1D08SP
10	WMS1B10SP	WMS1C10SP	WMS1D10SP
13	WMS1B13SP	WMS1C13SP	WMS1D13SP
15	WMS1B15SP	WMS1C15SP	WMS1D15SP
16	WMS1B16SP	WMS1C16SP	WMS1D16SP
20	WMS1B20SP	WMS1C20SP	WMS1D20SP
25	WMS1B25SP	WMS1C25SP	WMS1D25SP
30	WMS1B30SP	WMS1C30SP	WMS1D30SP



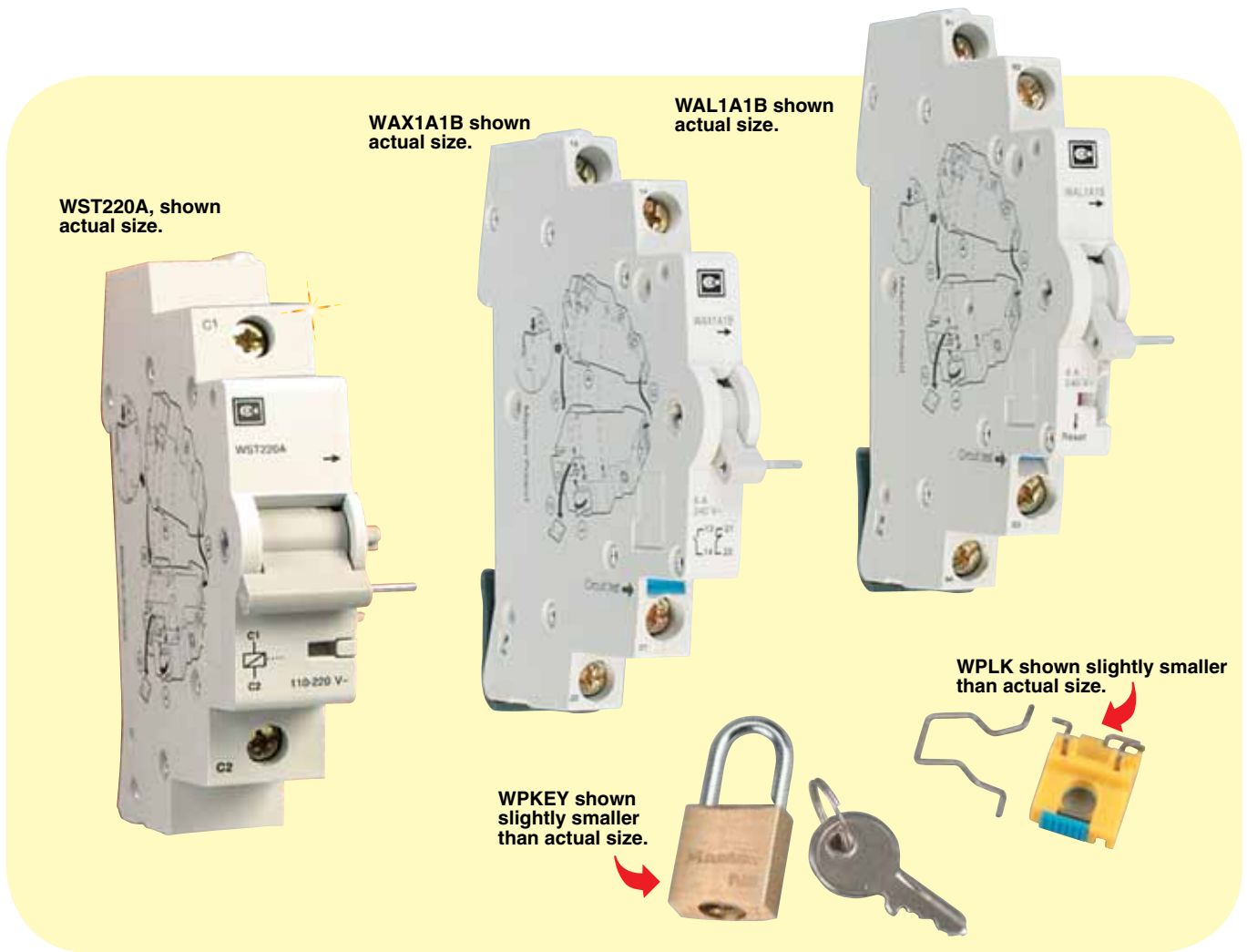
2-Pole

2-POLE			
AMPERE RATING	MODEL NO. CURVE B	MODEL NO. CURVE C	MODEL NO. CURVE D
1	N/A	WMS2C01SP	N/A
2		WMS2C02SP	WMS2D02SP
3		WMS2C03SP	WMS2D03SP
4		WMS2C04SP	WMS2D04SP
5		WMS2C05SP	WMS2D05SP
6	WMS2B06SP	WMS2C06SP	WMS2D06SP
7	WMS2B07SP	WMS2C07SP	WMS2D07SP
8	WMS2B08SP	WMS2C08SP	WMS2D08SP
10	WMS2B10SP	WMS2C10SP	WMS2D10SP
13	WMS2B13SP	WMS2C13SP	WMS2D13SP
15	WMS2B15SP	WMS2C15SP	WMS2D15SP
16	WMS2B16SP	WMS2C16SP	WMS2D16SP
20	WMS2B20SP	WMS2C20SP	WMS2D20SP
25	WMS2B25SP	WMS2C25SP	WMS2D25SP
30	WMS2B30SP	WMS2C30SP	WMS2D30SP



3-Pole

3-POLE			
AMPERE RATING	MODEL NO. CURVE B	MODEL NO. CURVE C	MODEL NO. CURVE D
1	N/A	WMS3C01SP	N/A
2		WMS3C02SP	WMS3D02SP
3		WMS3C03SP	WMS3D03SP
4		WMS3C04SP	WMS3D04SP
5		WMS3C05SP	WMS3D05SP
6	WMS3B06SP	WMS3C06SP	WMS3D06SP
7	N/A	WMS3C07SP	N/A
8	N/A	WMS3C08SP	WMS3D08SP
10	WMS3B10SP	WMS3C10SP	WMS3D10SP
13	N/A	WMS3C13SP	N/A
15	WMS3B15SP	WMS3C15SP	WMS3D15SP
16	N/A	WMS3C16SP	WMS3D16SP
20	WMS3B20SP	WMS3C20SP	WMS3D20SP
25	WMS3B25SP	WMS3C25SP	WMS3D25SP
30	WMS3B30SP	WMS3C30SP	WMS3D30SP



ACCESSORIES

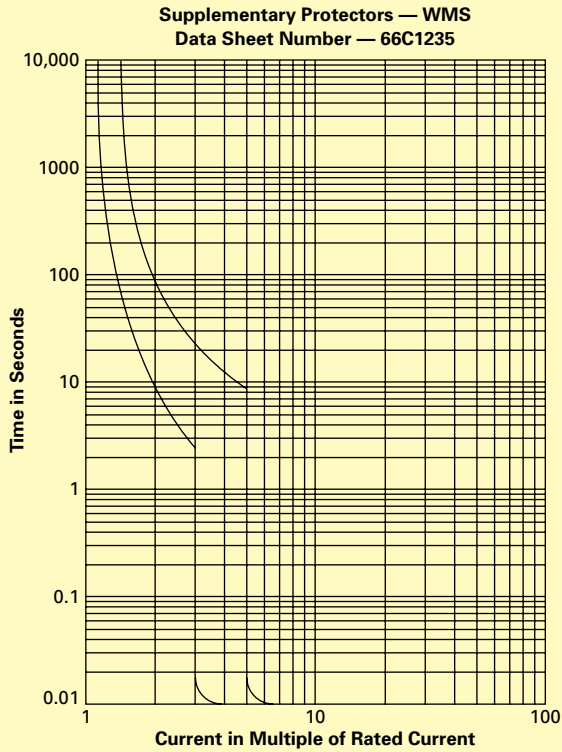
MODEL	DESCRIPTION
WAL1A1B	Alarm 1A/1B, 240V, 6A
WAX1A1B	Auxiliary 1A/1B, 240V, 6A
WIDL	Identification label
WPKEY	Padlock and keys
WPLK	Padlock provision
WST220A	Shunt trip, 120 to 220 Vac
WST415A	Shunt trip, 240 to 415 Vac
WST48D	Shunt trip, 12 to 48 Vdc

WMS SERIES ACCESSORY TECHNICAL DATA

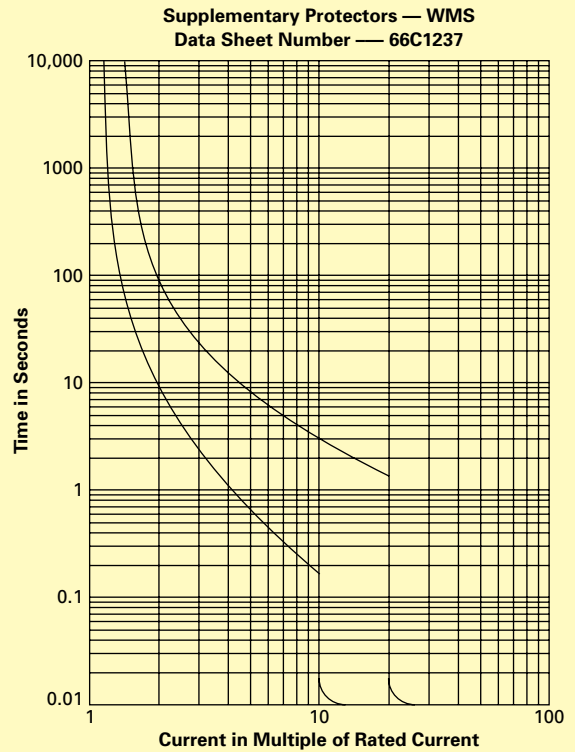
MODEL NUMBER	AUXILIARY SWITCH	AUXILIARY ALARM	SHUNT TRIP	UVR	ELECTRICAL CHARACTERISTICS	CABLE SIZE		TIGHTENING NM	TORQUE LB-IN
						MM2	AWG		
WAL1A1B	No	Yes	No	No	1 changeover contact 240V ~ 6 A	0.5 to 4	18 to 12	0.8	7.1
WAX1A1B	Yes	No	No	No	2 changeover contact 240V ~ 6 A	0.5 to 4	18 to 12	0.8	7.1
WST415A	No	No	Yes	No	230 to 415V/110 to 130V	0.5 to 4	18 to 12	0.8	7.1
WST48D	No	No	Yes	No	9 to 48V/48V	0.5 to 4	18 to 12	0.8	7.1
WST220A	No	No	Yes	No	110V/220V	0.5 to 4	18 to 12	0.8	7.1
WUVR240A	No	No	No	Yes	240V~ /110 to 130V	0.5 to 4	18 to 12	0.8	7.1
WUVR48D	No	No	No	Yes	48V/24 to 48V	0.5 to 4	18 to 12	0.8	7.1

Ordering Examples: **WMS1B06SP**, one pole, curve B, 6 A supplementary protector.
WMS3D30SP, three pole, curve D, 30 A supplementary protector and **WAL1A1B**, alarm.

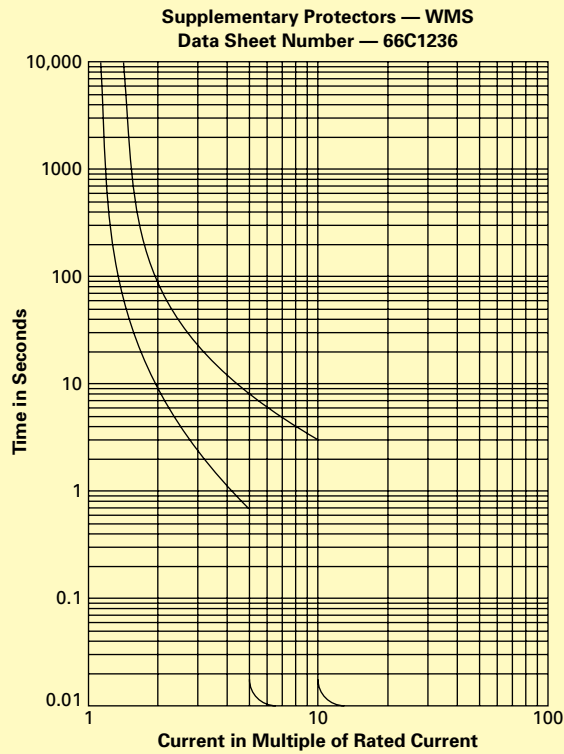
Curve B Time/Current Characteristic



Curve D Time/Current Characteristic



Curve C Time/Current Characteristic



**WMS3C20SP,
shown actual size.**