

CVP-RH Series MCB Specifications

Product Features:

- ◇ UL 489 List of certified full series of small circuit breakers rated current up to 125A
- ◇ The breakers can be mounted on standard 35mm DIN rails
- ◇ The voltage at 480Y / 277 Vac and 125 Vdc satisfies the standard 10kA break current
- ◇ Suitable for the protection of the main loop device
- ◇ The modulus width of each pole is only 0.71 inches (18mm)
- ◇ Contact position indication (red or green)
- ◇ The switch can be locked in the ON or OFF position



Typical Application Scenarios:

- ◇ Main loop or branch road protection
- ◇ Socket circuit (internal / external)
- ◇ External load equipment (external)
- ◇ PLC/I/O drop
- ◇ Power pack
- ◇ Control instruments
- ◇ UPS Uninterrupted Power Supply

Product Model:

	CVP	-	RH	1	A	A3	B	ZA	125	P	L
Company code											
	RH Series Hydraulic Type MCB										
poles:	1: 1 pole										
	2: 2 poles	2G: 2 poles w/Guard									
	3: 3 poles	3G: 3 poles w/Guard									
	4: 4 poles	4G: 4 poles w/Guard									
Circuit :	A: Switch Only (No Coil)		S: Auxiliary switch								
	B: Series Trip (Current)		T: Shunt Trip								
Trip curve:	A3: AC Short	D3: DC Short	AD3: DC, AC 50/60Hz Short								
	A4: AC Medium	D4: DC Medium	AD4: DC, AC 50/60Hz Medium								
	A5: AC Long	D5: DC Long	AD5: DC, AC 50/60Hz Long								
	H3: AC Inrush Short	H4: AC Inrush Medium	H5: AC Inrush Long								
Color:	B: Housing - Black		None: Housing - White				G: Housing - White				
	Actuator - White		Actuator - Red				Actuator - Grey				
Voltage:	(AC range:125~480V;		DC range:80~1000V DC)								
	L: 120V AC	S: 120/240V AC	D: 80V DC	ZA: 250V DC							
	M: 240V AC	Y: 277/480V AC	Z: 125V DC	ZB: 500V DC							
	N: 250V AC	T: 400V AC	ZC: 750V DC								
	H: 277V AC										
Rated Current:	0.5A ~ 400A										
Accessories:	None: Without Accessories										
	P: With terminal bus										
	S: With terminal wire										
Agency Approval:	T: CE Certified IEC/ EN 60947-2					LT: UL 489 Listed & TUV Certified IEC 60947-2					
	L: UL 489 Listed										

Technical Data

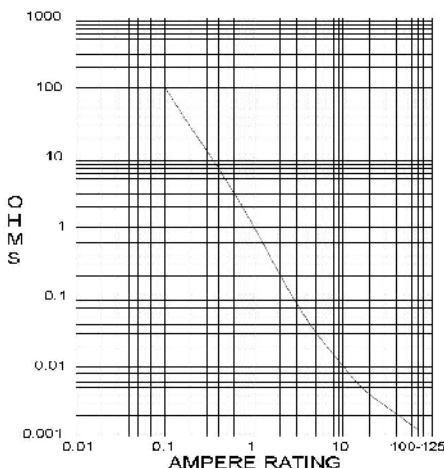
- **Protection Degree:** IP 20
- **Wire Range:** 1 to 50mm² (#16 to 1/0 AWG)
- **Operating Temperature:** -40 °C to +85 °C
- **Insulation Resistance:** ≥100MΩ at 500V DC
- **Mechanical/electrical life:** 10000 / 6000 times
- **Dielectric Strength:** 1500V AC for 1 min
- **Pollution Degree:** Class III
- **Mounting:** 35 mm DIN rail
- **Altitude:** Does not exceed 6,561ft (2,000m)
- **Torque (IEC):** 3.5Nm (Tunnel terminal blocks)
- **Relative air humidity:** ≤95%
- **Weight:** Approx. 118g per pole

Breaking capacity table

UL	CIRCUIT	MAX. VOL. RATING	FREQUENCY	CURRENT RATING AMPS	INTERRUPTING CAPACITY	NUMBER OF POLES
Listed UL 489	CVP-RH SERIES	277	AC 50/60	0.5~125	10,000	1 or 2
		277/480	AC 50/60	0.5~125	10,000	2,3 or 4
		125	DC	0.5 ~ 125	10,000	1 or 2
		80	DC	126-200	10,000	2 parallel
		80	DC	201-300	10,000	3 parallel
		80	DC	301-400	10,000	4 parallel
		277	AC 50/60	0.5 ~ 125	10,000	1
		120/240	AC 50/60	0.5 ~ 70	22,000	2 or 3
		250	DC	0.5 ~ 125	10,000	1
		500	DC	0.5 ~ 70	10,000	2 series
		750	DC	0.5 ~ 70	10,000	3 series
		1000	DC	0.5 ~ 70	10,000	4 series

CE CCC	CIRCUIT	MAX. VOL. RATING	FREQUENCY	CURRENT RATING AMPS	Ics	Icu	NUMBER OF POLES
IEC 60947-2 GB 14048.2	CVP-RH SERIES	250	AC 50/60	0.5~125	10,000	10000	1 or 2
		400	AC 50/60	0.5~125	10,000	10000	2, 3 or 4
		125	DC	0.5 ~ 125	10,000	10000	1
		80	DC	126-200	10,000	10000	2 parallel
		80	DC	201-300	10,000	10000	3 parallel
		80	DC	301-400	10,000	10000	4 parallel
		250	DC	0.5 ~ 125	6,000	6000	1
		500	DC	0.5 ~ 70	6,000	6000	2 series
		750	DC	0.5 ~ 70	6,000	6000	3 series
		1000	DC	0.5 ~ 70	6,000	6000	4 series

Resistance per pole values

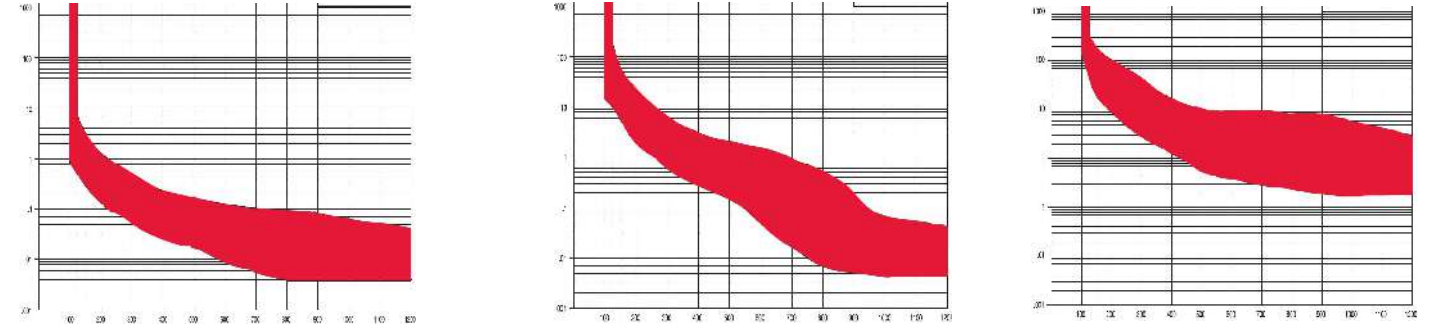


Current (Amps)	Tolerance (%)
0.10~5.0	15
5.1~20.0	25
20.1~125	35

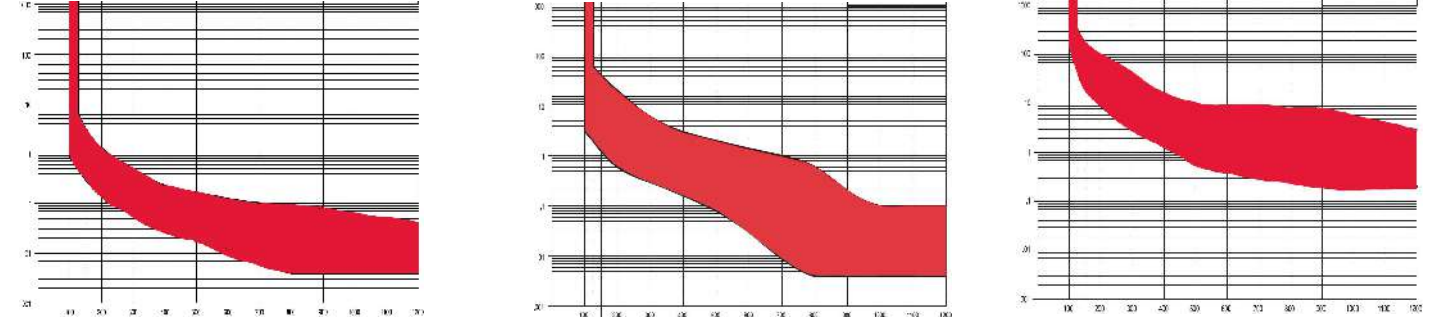
Time Delay Values

DELAY	100%	100~135%	135%	150%	200%	400%	600%	800%	1000%	1200%
A3	No Trip	May Trip	.700-12.0	.350-4.00	.130-1.30	.027-.220	.008-.130	.004-.090	.004-.045	.004-.040
A4	No Trip	May Trip	10.0-120	6.00-60.0	2.20-20.0	.200-3.00	.020-2.00	.013-.850	.013-.050	.005-.040
A5	No Trip	May Trip	50.0-700	32.0-350	10.0-90.0	1.50-15.0	.500-7.00	.020-3.00	.006-2.00	.005-.100
D3	No Trip	May Trip	.500-6.50	.300-3.00	.130-1.20	.031-.220	.011-.120	.004-.090	.004-.060	.004-.040
D4	No Trip	May Trip	2.00-60.0	1.20-40.0	.600-20.0	.150-3.00	.030-1.30	.004-.600	.004-.100	.004-.100
D5	No Trip	May Trip	45.0-345	20.0-150	9.00-60.0	1.40-11.4	.150-5.80	.009-3.70	.005-1.70	.005-.500
H3	No Trip	May Trip	.700-12.0	.400-6.00	.180-2.30	.050-.600	.026-.300	.018-.200	.014-.150	.012-1.30
H4	No Trip	May Trip	7.00-100	3.00-50.0	1.10-18.0	.220-3.00	.120-1.70	.075-1.20	.050-.850	.042-.720
H5	No Trip	May Trip	50.0-700	31.0-350	12.0-150.0	1.50-20.0	.700-10.00	.404-7.90	.026-6.50	.198-5.80
AD3	No Trip	May Trip	.400-8.00	.300-4.00	.130-1.30	.027-.220	.008-.130	.004-.090	.004-.060	.004-.040
AD4	No Trip	May Trip	1.80-100	1.20-60.0	.600-20.0	.150-3.00	.030-1.30	.004-.600	.004-.110	.004-.100
AD5	No Trip	May Trip	35.0-520	20.0-350	9.00-90.0	1.40-15.0	.150-7.00	.009-3.70	.005-2.00	.004-1.00

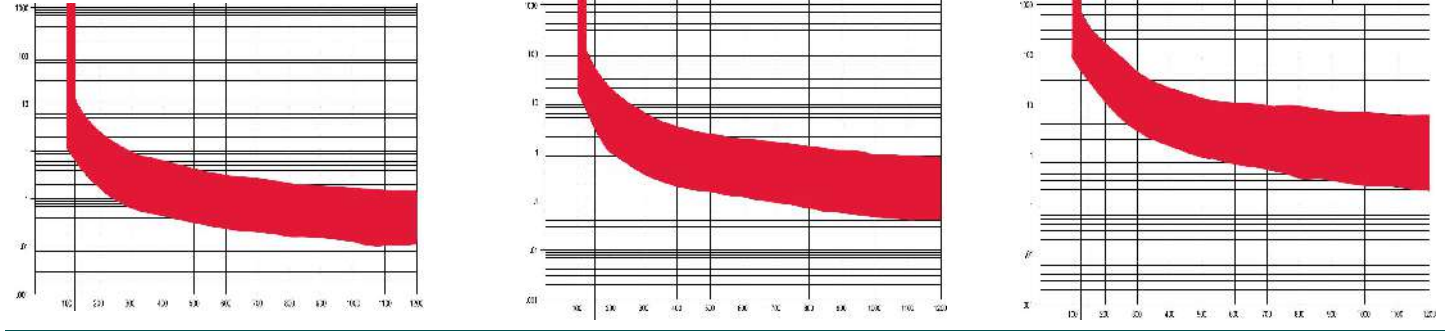
AC 50/60Hz SHORT DELAY (A3) AC 50/60Hz MEDIUM DELAY (A4) AC 50/60Hz LONG DELAY (A5)



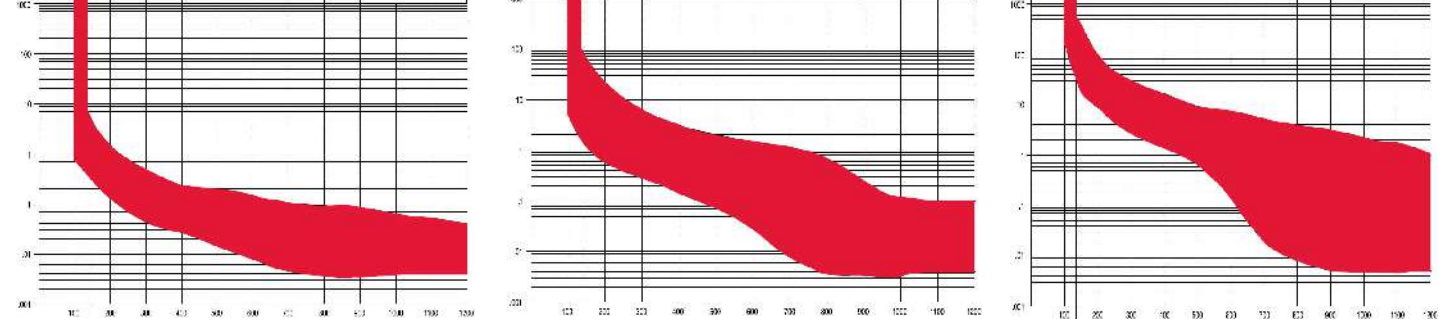
DC SHORT DELAY (D3) DC MEDIUM DELAY (D4) DC LONG DELAY (D5)




High Inrush, AC 50/60Hz SHORT DELAY (H3) High Inrush, AC 50/60Hz MEDIUM DELAY (H4) High Inrush, AC 50/60Hz LONG DELAY (H5)



DC, AC 50/60Hz SHORT DELAY (AD3) DC, AC 50/60Hz MEDIUM DELAY (AD4) DC, AC 50/60Hz LONG DELAY (AD5)



Auxiliary Switch	Shunt Trip
 <p>Auxiliary Switch Rating</p> <ul style="list-style-type: none"> • SPDT • 10.0 AMPS -250VAC • 1.0A 65 VDC • 0.5A 80 VDC <p>Auxiliary Switch Wire</p> <ul style="list-style-type: none"> • Cu Only • Range: 0.5~1.5mm² • Torque: 0.25Nm • Strip Length: 7~8mm 	 <ul style="list-style-type: none"> • DC - 6V, 12V, 24V • AC - 120V, 160V <p>Note: Dual Coil Voltage Coils with Shunt Trip Construction trip instantaneously on line voltage. Dual Coil Voltage Coils require 30VA minimum power t trip instantaneously and are rated for intermitten duty only.</p> <p>Shunt Wire</p> <ul style="list-style-type: none"> • Cu Only • 0.5~1.5mm² • Torque 0.25Nm max. • Strip Length 7~8mm

Dimensions(mm)

