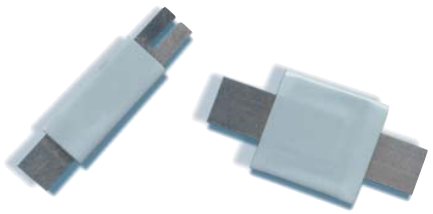
VLD



Strap Type, 12 V

Standard

UL 1434 1st Edition
CSA C22.2 No. 0 CSA TIL No. CA-3A

Approvals

cULus Recognition
TÜV

Features

The new VLD product series feature a slim, low profile and low resistance design. These devices are ideal to install directly onto the latest generation batteries including cylindrical and prismatic cells. The VLD product offers protection against both overcurrent and overtemperature fault conditions.

Specifications

Packaging

A small pack
D standard

Materials

Insulating material: Polyester Tape
Terminals: Nickel

Operating / Storage Temperature

-40 °C to +85 °C (consider de-rating)

Humidity Ageing

+60 °C, 95 % R.H., 1000 hours, ± 10 % typical resistance change

Vibration

MIL-STD-883C, Condition A, no change

Thermal Shock

MIL-STD-202F, Method 107G
+85 °C to -40 °C 10 times ±5 % typical resistance change

Marking

"P", Part Code, identification, lot number

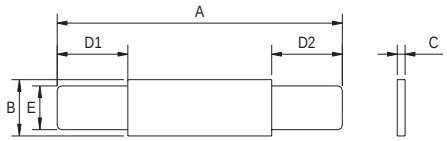


Figure 1

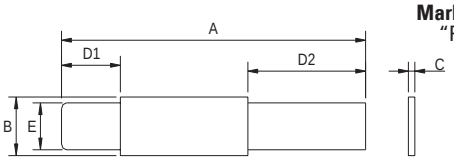


Figure 2

Dimensions (mm)

Model	Fig	A Min	A Max	B Min	B Max	C	D1 Min	D1 Max	D2 Min	D2 Max	E Min	E Max	packaging quantity small pack	packaging quantity standard
VLD170	1	20.8	23.2	3.5	3.9	0.8	4.5	6.5	4.5	6.5	2.4	2.6	500	10,000
VLD175L	2	29.3	31.7	2.9	3.3	0.8	5.2	6.8	10.0	12.5	2.4	2.6	500	10,000
VLD175XL	2	25.5	28.2	3.5	3.9	0.8	8.7	10.3	5.7	7.3	2.4	2.6	500	10,000
VLD230	1	20.9	23.1	4.9	5.3	0.8	4.1	5.8	4.1	5.8	3.9	4.1	500	10,000

Permissible continuous operating current is ≤ 100 % at ambient temperature of 25 °C (77 °F).

Model	I_{hold} (A)	I_{Trip} (A)	$V_{max.\ dc}$ (V)	$I_{max.}$ (A)	max. time to trip (s @ A)	$P_{d\ max}$ (W)	Resistance $R_{min.}$ ( )	Resistance $R_{1\ max.}$ ( )	Resistance $R_{1\ max.}$ ( )	Approvals cURus	Approvals TÜV
VLD170	1.70	4.10	12	100	5.0 @ 8.50	1.40	0.018	0.032	0.064	•	•
VLD175L	1.75	4.20	12	100	5.0 @ 8.75	1.40	0.017	0.031	0.062	•	•
VLD175XL	1.75	4.20	12	100	5.0 @ 8.75	1.40	0.017	0.031	0.062	•	•
VLD230	2.30	5.00	12	100	5.0 @ 10.0	2.50	0.012	0.018	0.036	•	•

NOTE:
I_{hold} = Hold current: maximum current device will pass without tripping in 25 °C still air.
I_{trip} = Trip current: minimum current at which the device will trip in 25 °C still air.
V_{max} = Maximum voltage device can withstand without damage at rated current (I_{max})
I_{max} = Maximum fault current device can withstand without damage at rated voltage (V_{max})

P_d = Power dissipated from device when in the tripped state at 25 °C still air.
R_{min} = Minimum resistance of device in initial (un-soldered) state.
R_{1max} = Maximum resistance of device at 25 °C measured one hour after tripping for 20 s.
Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.
Specifications are subject to change without notice

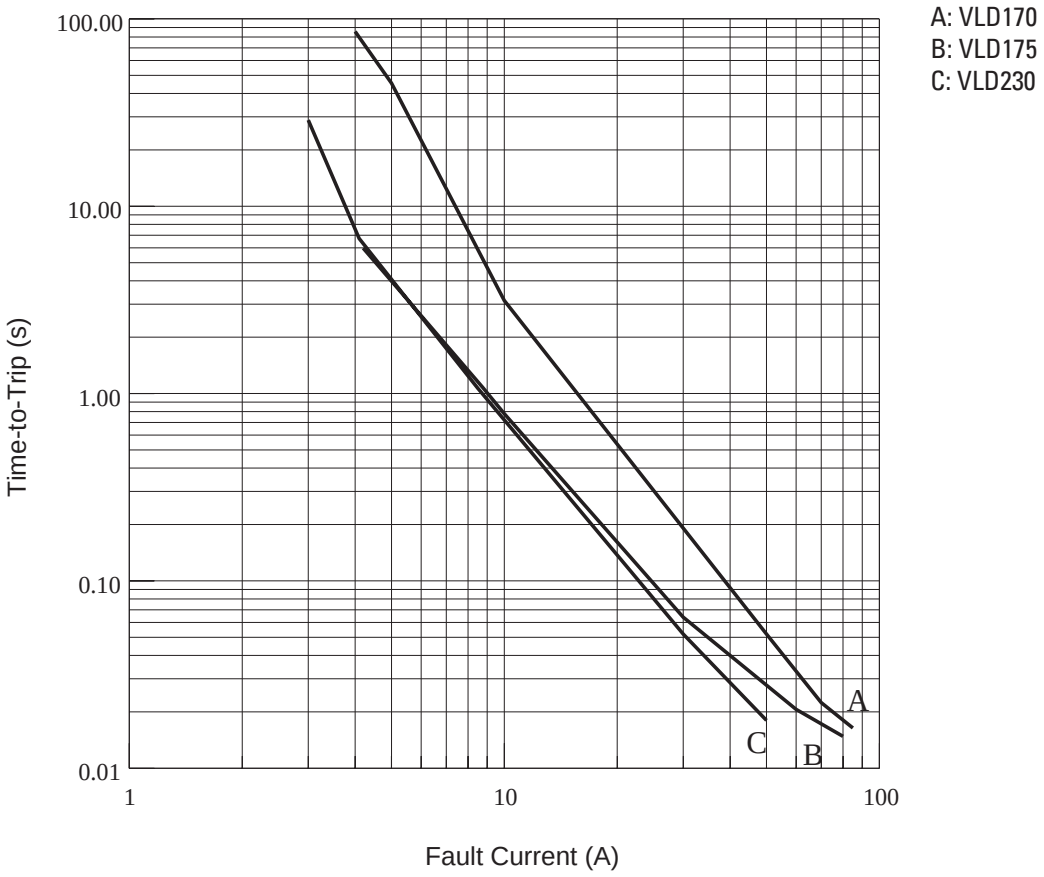
Order Information

Qty.	Order-Number	Model	Packaging

WICKMANN

In our continuing strategy to deliver unparalleled circuit protection solutions, technical expertise and application leadership, we proudly introduce the WICKMANN Group and its products to the Littelfuse portfolio.

VLD



Thermal Derating Chart

Model	Ambient Operation Temperature - I_{hold} (A)							
	-40 °C	-20 °C	0 °C	25 °C	40 °C	50 °C	60 °C	70 °C
VLD170	3.50	2.90	2.40	1.70	1.20	1.00	0.70	0.30
VLD175L	3.50	2.90	2.40	1.75	1.30	1.00	0.80	0.30
VLD175XL	3.50	2.90	2.40	1.75	1.30	1.00	0.80	0.30
VLD230	5.00	4.20	3.40	2.30	1.70	1.30	0.90	0.40