

# Technical Information: Isolator Switches



## OVERVIEW

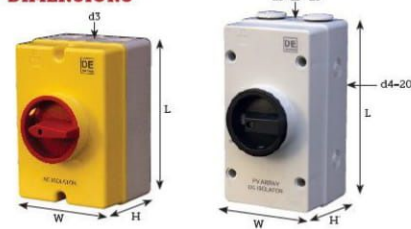
Isolator switches are vital when working with electrical circuits. Hylec Isolator Switches provide fast electrical isolation for industrial machinery, commercial buildings, power supplies, security equipment and HVAC at one of the best price/performance ratios on the UK market.

Isolator control switches are manufactured from completely flame retardant polycarbonate, rated to UL94V-0, providing an additional margin of safety over competitive products with a lower flame-resistance rating.

## FEATURES

- IP66 RATED**
- AC & DC RANGE**
- FLAME RETARDANT UL94V-0**
- 4-POLE + EARTH TERMINAL INCLUDED**
- LARGE HOUSING - SUPERIOR CABLE MANAGEMENT**
- TUV & UL APPROVED**
- CAPTIVE RETAINED COVER SCREWS**
- CAN BE PADLOCKED (PADLOCK NOT INCLUDED)**
- BEST PRICE PERFORMANCE ON UK MARKET**

## DIMENSIONS



Product Dimensions: AC

AC	W	H	L
20A	98	80	145
32A	98	80	145
40A	98	80	145
63A	98	81	180
80A	98	81	180
100A	98	81	180

Product Dimensions: DC

DC	W	H	L
16A	98	81	180
25A	98	81	180
32A	98	81	180



MAKING THE RIGHT CONNECTIONS

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### AC Isolation Switch Specification

Model	DE1S.04.20AC	DE1S.04.25AC	DE1S.04.32AC	DE1S.04.40AC	DE1S.04.63AC
Rated insulation voltage (V)	690	690	690	690	690
Rated carry current (A)	20	25	32	40	63
Rated operating current (A)					
AC-23A	15	179	22	30	43
AC-3	11	12.7	15	22	36
Rated voltage	240 440	240 440	240 440	240 440	240 440
Rated power control (kW)					
AC-23A	3.7 5.5	4.5 7.8	5.5 11	7.5 15	9 22
AC-3	2.7 3.7	3.2 5.3	4 7.5	5.5 11	8 18.5
UL-CSA	240 440	240 440	240 440	240 440	240 440
Motor load (HP)	2 3	3.3 5.9	5 10	7.5 15	10 20
Rated current within (A)	180	215	264	360	516
Connect Wires (mm <sup>2</sup> )	1.25-5.5	1.56-9.04	2-14	2-44	2-38
Screw Torque (N - m)		0.8(8.16kgfcm)			1.2(12.24kgfcm)

### DC Isolation Switch Specification

Main Parameters	DE1S.04.16DC	DE1S.04.25DC	DE1S.04.32DC
Rated insulation voltage	Ui	1500V	1500V
Rated thermal current	Ith	16A	25A
Rated impulse withstand voltage	Uimp	8000V	8000V
Rated short-time withstand current (s)	Icw	2, 4, 6, 8 2H, 3H, 4H	800A 1300A
Rated short-circuit making capacity	Icm	2, 4, 6, 8 2H, 3H, 4H	800A 1300A
Rated conditional short-circuit current	Icc	5000A	5000A
Maximum fuse size	gL(g)	40A	63A

Maximum cable cross sections	DE1S.04.16DC	DE1S.04.25DC	DE1S.04.32DC
Solid or standard	4 - 16mm <sup>2</sup>	4 - 16mm <sup>2</sup>	4 - 16mm <sup>2</sup>
Flexible	4 - 10mm <sup>2</sup>	4 - 10mm <sup>2</sup>	4 - 10mm <sup>2</sup>
Flexible (+multicore cable end)	4 - 10mm <sup>2</sup>	4 - 10mm <sup>2</sup>	4 - 10mm <sup>2</sup>
General parameters	DE1S.04.16DC	DE1S.04.25DC	DE1S.04.32DC
Mechanical life	10,000	10,000	10,000
Number of DC poles	4	4	4
Distance of contacts (per pole)	8mm	8mm	8mm
Operation temperature	-25°C - +70°C	-25°C - +70°C	-25°C - +70°C
Storage temperature	-40°C - +70°C	-40°C - +70°C	-40°C - +70°C
Pollution degree	2	2	2
Over voltage category	I to III	I to III	I to III
IP rating of shaft and mounting	IP66	IP67	IP66
Weight	2 2H4 3H6 4H8	0.14kg 0.20kg 0.26kg 0.31kg	

Torque	DE1S.04.16DC	DE1S.04.25DC	DE1S.04.32DC
Tightening torque terminal screws M4	1.2-1.3Nm	1.2-1.3Nm	1.2-1.3Nm
Tightening torque panel mounting screws ST4.2	N/A	N/A	N/A
Tightening torque knob screws M3	2.0-2.3Nm	2.0-2.3Nm	2.0-2.3Nm
Tightening torque knob screws M3	0.5-0.7Nm	0.5-0.7Nm	0.5-0.7Nm
Switching on or off torque	0.9-1.3Nm	0.9-1.3Nm	0.9-1.3Nm
Power loss per switch max.	DE1S.04.16DC	DE1S.04.25DC	DE1S.04.32DC
2	1W	2W	3W
2H4	2W	4W	6W
3H6	3W	6W	9W

## CIRCUIT DIAGRAM FOR BOTH AC AND DC SWITCHES

