



# **DPS SERIES**

## **EX/ADR Battery Master Switches**

The DPS-1202 (12 Volt) and DPS-2402 (24 Volt) Battery Master Switch have been designed to comply with Australian Standards AS 2809.2 and European ADR 2005. The DPS-1202 and DPS-2402 are a 2 Pole Bi-stable electro-mechanical relay switch with mechanical locking. It also incorporates Printed Circuit Boards (PCB) to monitor and operate several additional functions, many previously unavailable on older style battery isolator switches.

The prime function of the DPS-1202 and DPS-2402 is to disconnect and isolate the main battery positive and negative circuits of the vehicle or engine plant to render it inoperable for safety. You are offered several options to operate the switch; it may be operated directly at the control panel on the switch face, it can also be operated by means of a control switch located in the drivers' cabin or additional control switches at desired locations around the vehicle. The DPS Series Battery Master Switches allows for remote activation and deactivation.

In EMERGENCY SHUT DOWN situation, such as in the event of a roll over the DPS-1202 and DPS-2402 switches will disconnect all power immediately via the emergency shut down switch or via a Roll Over Device.

In NON EMERGENCY SHUT DOWN situations, the Battery Master Switch will step through a pre-programmed shut-down, which after a 10 second delay, enables the safe disconnection of on board engine management systems to avoid data corruption. Incorporated in the non-emergency shut down is Alternator field isolation to ensure that the alternator has been shut down prior to the disconnection of the main battery supply. If the alternator is not adequately shutdown, damage to the alternator and vehicle electronics is likely to occur and engine would remain running.



1 Endeavour Way, Sunshine West P (03) 9321 9000 F (03) 9321 9007

#### Wodonga, Victoria

27 Mint Street, Wodonga P (02) 6059 9300 F (02) 6024 2700

#### **Newcastle, New South Wales**

5/33 Pendlebury Road, Cardiff P (02) 4918 3600 F (02) 4954 9840

#### **Sydney. New South Wales**

23/62-66 Newton Road, Wetherill Park P (02) 8785 4000 F (02) 9609 2166

1/508 Woolcock Street, Garbutt P (07) 4758 8000 F (07) 4755 2698

#### Perth. Western Australia

85 Knutsford Avenue, Belmont P (08) 6274 6300 F (08) 9479 1881

#### Launceston, Tasmania

1/33 Churchill Park Drive, Invermay P (03) 6323 4200 F (03) 6331 9094

#### Adelaide. South Australia

189 Cormack Road, Wingfield P (08) 8116 3400 F (08) 8340 4511

# **DPS SERIES**

**EX/ADR Battery Master Switches** 

Australian Standard ADR - AS2809 compliant













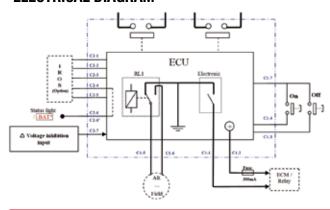






baxters.com.au | 1800 621 068

#### **ELECTRICAL DIAGRAM**



#### CONNECTOR C1 (GREY OR BLACK): CONTROL AND ALIXILIARY CIRCUITS

CONNECTOR CT (GRET OR BLACK). CONTROL AND AUXILIANT CIRCUITS		
C1-1	Grounded (-BAT) controlled output * / 300mA Max. External fuse recommended	
C1-2	«+» Battery supply output	
C1-3	Remote Off pushbutton (momentary action)	
C1-4	Remote On pushbutton (momentary action)	
C1-5	Auxiliary relay #1 (Common) ** / rating: 10A External fuse recommended (short circuit protection)	
C1-6	Auxiliary relay #1 (NO contact) ** / 10A Max.	
C1-7	Remote switches supply (protected) ***	

- \* This output is deactivated 10 seconds after the main circuits opening
- \*\* The relay RL1 is deactivated at least 30ms before the main circuits opening

"IROS" MODULE & BATTERY VOLTAGE MONITORING		
C2-1	iROS "-" Battery supply (limited)	
C2-2	iROS shutdown control * / Low level (-)	
C2-3	iROS "+" Battery supply (limited)	
C2-4	iROS warning light output / Low level (-)	
C2-5	iROS test input / High level (+)	
C2-6	Vehicle in cab status light (= Pin 4)	
00.01	" " Pattern and to Con MOTE to Jan ( ) (do directed to the annuity of the last to be a solitable	

**C2-6'** "-" Battery supply (see NOTE below) (dedicated to the specific version double + switch)

Voltage monitoring (LVM) inhibition / High level (+)

#### DPS-1202PP Specificities of the "double positive switch" version (+BAT / +BAT)

NOTE This version is used to switch off 2 circuits connected to the positive battery terminals. C2-6' (pin 6 of connector C2) has to be connected to "- BAT" supply

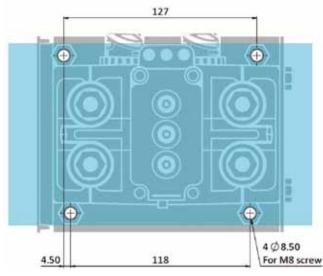
#### **TECHNICAL DATA**

MAIN CHARACTERISTICS	
Rated voltage	12/24V
Temperature range	-40 to +85 °C
Protection degree (ISO20653)	IP67
Housing material	PBT reinforced
Weight	3200g
ADR/ATEX Approval	ADR regulation Ex ib IIC T6 Gb - ATEX Ex II 2G
Compliant with directive	REACH (2006/121/EC) - ELV (2000/53/EC)
Hole for padlock	7mm
Padlock shackle diameter (Padlock not supplied)	ømin: 5mm - ømax: 6.5mm
Padlock shackle height	15mm min - 25mm max
POWER CIRCUIT	
Continuous rating	2 x 300A (Bi-stable electro-mechanical relays)
Overload	2 x 1500A (5s)
Max DC voltage	30V
Terminals size	4 x M10
Contact resistance	<1mΩ
Terminals length	9mm
Tightening torque	14N.m±20%
Terminals material	Silver plated copper
CONTROL CIRCUIT	
Voltage range	10.5 - 16V / 18 - 30V
Control signal	ON / OFF (1/0)
Switching current	10 A - 12V or 7.3A - 24V (200 ms)
Idle current in OFF position	≈7 mA
Connection	C1 connector - PIN 3 & 4
AUXILIARY CIRCUIT	
Туре	Relay control output
Continuous rating	10 mA
Connection	C1 connector - PIN 5 & 6
OTHER FUNCTIONS	
Low battery Voltage Monitoring	
Automatic disconnection function	

#### PRODUCT SELECTION

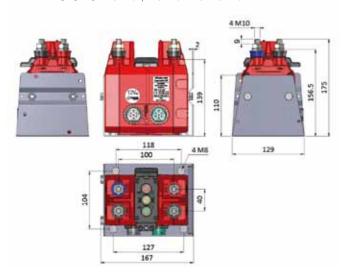
P/N	VOLTAGE	POLARITY
DPS-1202	12V	+/- CUT OFF
DPS-1202PP	12V	+/+ CUT OFF
DPS-2402	24V	+/- CUT OFF

#### **MOUNTING INTERFACE**



Screwing torque M8: 10N.m ±10%

## **DIMENSIONS** DPS-1202. DPS-1202PP & DPS-2402



## **ACCESSORIES**

**CONTROL SWITCH** 4-Pin ISO 15170 / DIN 75585 electrical connection. 202528





 $<sup>^{\</sup>star\star\star}$  A remote control device (not supplied) to facilitate the disconnecting and reconnecting functions of the battery switch shall be installed in the driver's cab. Others remote push-buttons may be installed outside in parallel (e.g. chassis). The control switches shall be protected against inadvertent operations (e.g. cover...).

<sup>\*</sup> In case of emergency (via "iROS" module) all auxiliary and main circuits are operated immediately without any delay. If connector C2 is not used, it shall be protected by a blind plug (our P/N 102011)