

DATA SHEET VARIOSPEED®6 BATTERY BACKUP UNIT – CONTROLS GROUPED (VS6-BBU-CG)

UNICLASS: L4231

EPIC: D25

VERSION: Issue N – July 2019



LEADING THE WAY IN FIRE PROTECTION

VARIOSPEED®6 BATTERY BACKUP UNIT – CONTROLS GROUPED (VS6-BBU-CG)

PRODUCT DESCRIPTION

The Variospeed®6 BBU-CG system is used for Smoke / Fire Curtain(s) fitted with 24Vdc permanent magnet electrical motors fitted with an internal 24Vdc electromagnetic brake, as standard. When the Smoke / Fire curtain(s) are fully retracted, the internal electromagnetic brake is powered, keeping the Smoke / Fire curtain(s) in their retracted position. Power to the motor is completely isolated, prolonging the life of the motor and maintaining manufacturers supply warranty.

The motors include built in short circuit and open circuit protection, meaning the curtains will deploy under total controlled gravity failsafe at a descent rate compliant with BS EN 12101 and BS8524 even if the motor wires are severed, i.e. shorted together or disconnected from the Motor Control Card (MCC).

OPERATION

In the event of an alarm signal the Smoke / Fire curtain(s) will immediately deploy to their Fire Operational Position (FOP) under Gravity Failsafe.

If there is a mains power failure the Smoke / Fire curtain(s) will be held in the retracted position for 30 minutes under Battery Backup (BBU) before being deployed to their Fire Operational Position (FOP). If an alarm signal is received during a mains power failure, the curtain(s) will deploy immediately to their Fire Operational Position (FOP).

The curtain(s) will descend under Total & Controlled GFS (Total Gravity Failsafe).

A maximum of 4 Motor Control Cards (MCC's) can be incorporated inside the 500(h) x 400(w) x 210(d) cabinet. The size of the BBU-CG cabinet can be increased to accommodate a greater number of Motor Control Cards (MCC's).

The Battery Back-Up facility is provided by two 12V 7Ah batteries, which are constantly charged by the BBU.

SPECIFICATION

Power Input:

220-240Vac 50/60Hz dedicated supply

Alarm Input:

Normally closed contact from fire alarm.
Open on alarm activation.

Outputs:

24Vdc to the Motor

Material:

Mild Steel

Finish:

RAL 7035 (Light Grey)

IP Rating:

IP55

Temperature Range:

0°C to +50°C

Location:

Internal

For Control Panel sizes, Power ratings and weights, please see Table 1.

VARIOSPEED®6 BATTERY BACKUP UNIT – CONTROLS GROUPED (VS6-BBU-CG)

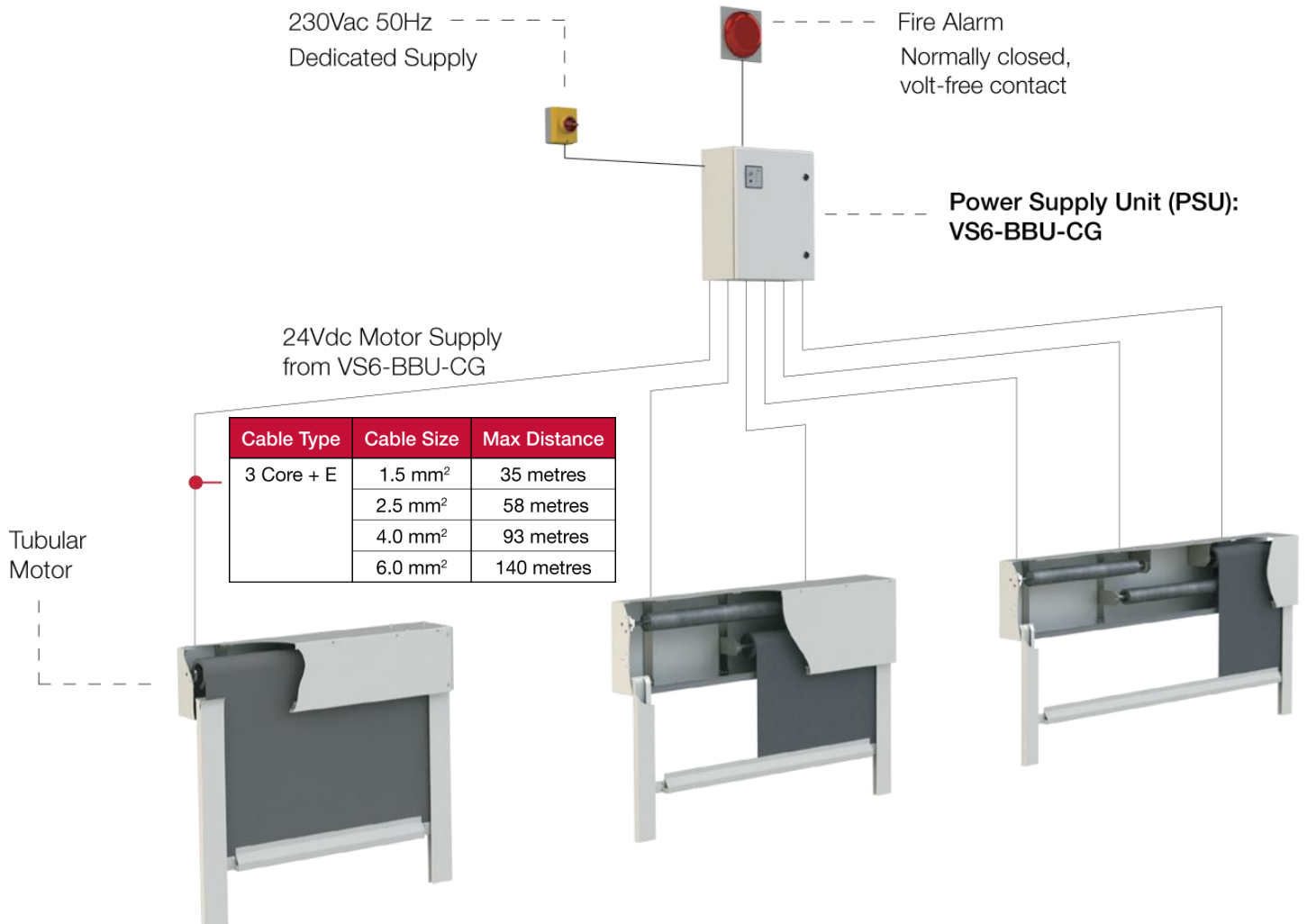
VARIOSPEED®6 STANDARD CONTROL PANEL SPECIFICATIONS

Note: the cabinet size may vary depending on additional ancillaries. Coopers Fire will confirm the cabinet size at enquiry.

PSU Reference	Cabinet Size (mm)	Static Load (W)	Maximum Load (W)	Approx. Unit Weight (kg)
BBU1	500 x 400 x 210	20	170	16
BBU2	500 x 400 x 210	26	290	17
BBU3	500 x 400 x 210	32	410	19
BBU4	500 x 400 x 210	38	530	20
BBU5 – 6	600 x 600 x 210	50	1000	35
BBU7 – 8	800 x 600 x 250	62	1000	50
BBU9	800 x 600 x 250	68	2000	65
BBU10 – 16	1200 x 800 x 300	110	2000	100
BBU17 – 18	1200 x 800 x 300	122	3000	115
BBU19+	<i>Contact Coopers Fire for information</i>			

Table 1

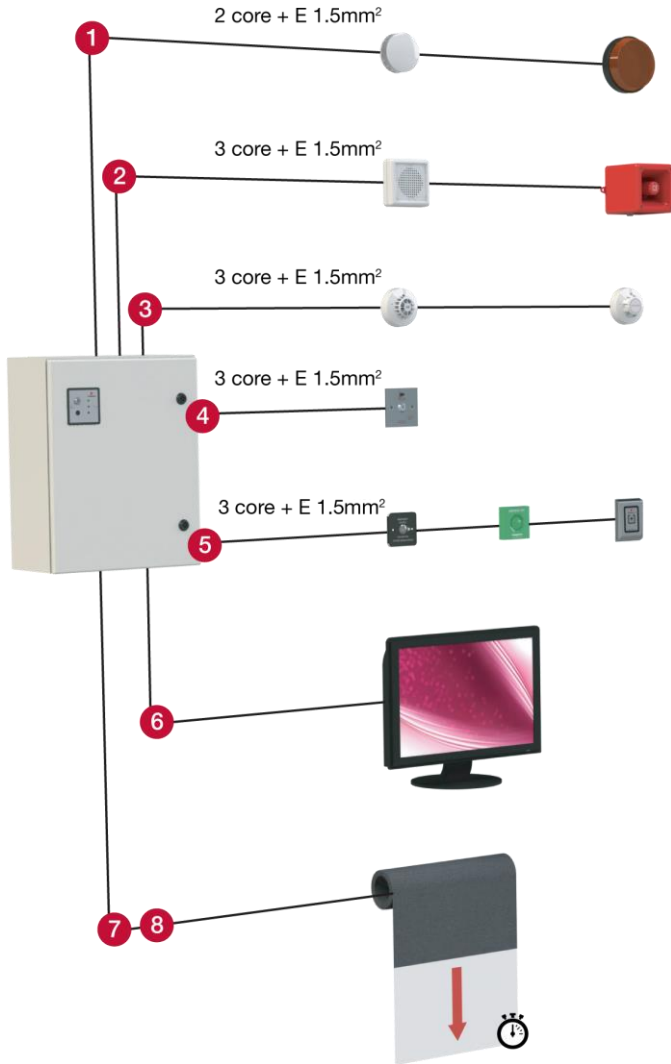
VARIOSPEED®6 CONTROLS GROUPED (CG) – TYPICAL WIRING LAYOUT



VARIOSPEED®6 BATTERY BACKUP UNIT – CONTROLS GROUPED (VS6-BBU-CG)

CONTROLS – OPTIONAL EXTRAS MATRIX

See the table below for use of optional extras available.



Optional Extras		Control Panel Type	
		ERU / MONO	BBU
1	Light Warning Unit	✓	✓
2	Voice Warning Unit	✓	✓
3	Heat Detector Smoke Detector	✓	✗
4	Test / Reset Switch	✓	✓
5	Emergency Retract Push Buttons	✓	✗
6	Building Management System (BMS) Interface (see next page for more information)	✓	✓
7	Adjustable Split Drop and Half Drop Enabled	✓	✗
8	Safety Edge / Bump Stop	✓	✗

- ERU:** Emergency Retract Unit
MONO: Control Panel for single curtain i.e. one roller
BBU: Battery Backup Unit

For Optional Extra datasheets, please Visit Coopers Fire website at www.coopersfire.com

VARIOSPEED®6 BATTERY BACKUP UNIT – CONTROLS GROUPED (VS6-BBU-CG)

BUILDING MANAGEMENT SYSTEM (BMS) OPTIONS

See Table 2 below for guidance on the correct BMS components required for Coopers Fire Variospeed®6 controllers.

Control System Name	BMS Description	Component/ Stock Number	Note	BMS Outputs				
				Control Panel Fault (Mains power & alarm)	Curtain Up	Curtain Down	Curtain Fault	Battery low charge, battery fault, battery disconnected
Variospeed®6	Standard BMS	PZUE PCB 30074	1 x PZUE PCB per BBU/ERU	✓	✗	✗	✗	✗
	Curtain Status BMS	BMS03 Kit 30093	1 x BMS03 Kit per curtain	✗	✓	✓	✓	✗
	Battery Monitoring BMS	SLAM PCB 34105	1 x SLAM PCB per BBU/ERU	✗	✗	✗	✗	✓
	Full BMS	PZUE PCB 30074 BMS03 Kit 30093 SLAM PCB 34105	1 x PZUE PCB per BBU/ERU 1 x BMS03 Kit per curtain 1 x SLAM PCB per BBU/ERU	✓	✓	✓	✓	✓

Table 2



Coopers Fire Ltd,
Edward House, Penner Road,
Havant, Hampshire, PO9 1QZ
United Kingdom

Phone: +44 (0)2392 454 405
Email: info@coopersfire.com
Web: www.coopersfire.com

Coopers Fire Ltd has a policy of continuous product improvement.

As such we reserve the right to change design and specifications without prior notice.

© Coopers Fire Ltd. All content and products are copyright of Coopers Fire Ltd. Registered in England Number: 2010274.
*Multiple patents granted and pending.