

# DATA SHEET VARIOSPEED 6 EMERGENCY RETRACT UNIT – CONTROLS GROUPED (VS6-ERU-CG)

UNICLASS: L4231

EPIC: D25

VERSION: Issue V –  
22/01/2025



LEADING THE WAY IN FIRE PROTECTION

# VARIOSPEED 6 EMERGENCY RETRACT UNIT – CONTROLS GROUPED (VS6-ERU-CG)

## PRODUCT DESCRIPTION

The Variospeed 6 ERU-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 BS 8524 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).

If there is a mains power failure the Smoke / Fire curtain(s) will be held in the retracted position 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).

The Emergency Retract Facility is available during an alarm condition, once the curtains have reached their FOP. The Emergency Retract Facility is also available during a mains failure once the curtain(s) have descended. This can take the form of an Emergency Retract Button or a Fireman's Override. The number of retract operations under mains power failure is limited to the battery power and affected by the size of the curtain(s), number of curtains and any optional extras powered by the ERU-CG.

A maximum of 3 Motor Control Cards (MCCs) can be incorporated inside the 500(h) x 400(w) x 210(d) cabinet. The size of the ERU-CG cabinet can be increased to accommodate a greater number of Motor Control Cards (MCCs).

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

## SPECIFICATION

### Power Input:

220-240Vac 50/60Hz 1Ph 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.**

## SPECIFICATION

- Total Gravity Failsafe System (TGFS).
- Adjustable Battery Backup (BBU).
- Can be provided with stand-alone Coopers Fire smoke and/or heat detectors for local curtain activation.
- Can be connected to the buildings Building Management System (BMS) to provide status for:
  - Curtain Up (Curtain fully retracted, not just signalled to retract).
  - Curtain Down (Curtain fully deployed, not just signalled to deploy)
  - Curtain Fault (Curtain fault)
- Curtains can be configured for

A BS8524 VS6-ERU-CG with an additional battery fault LED pictured below:



# VARIOSPEED 6 EMERGENCY RETRACT UNIT – CONTROLS GROUPED (VS6-ERU-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.*

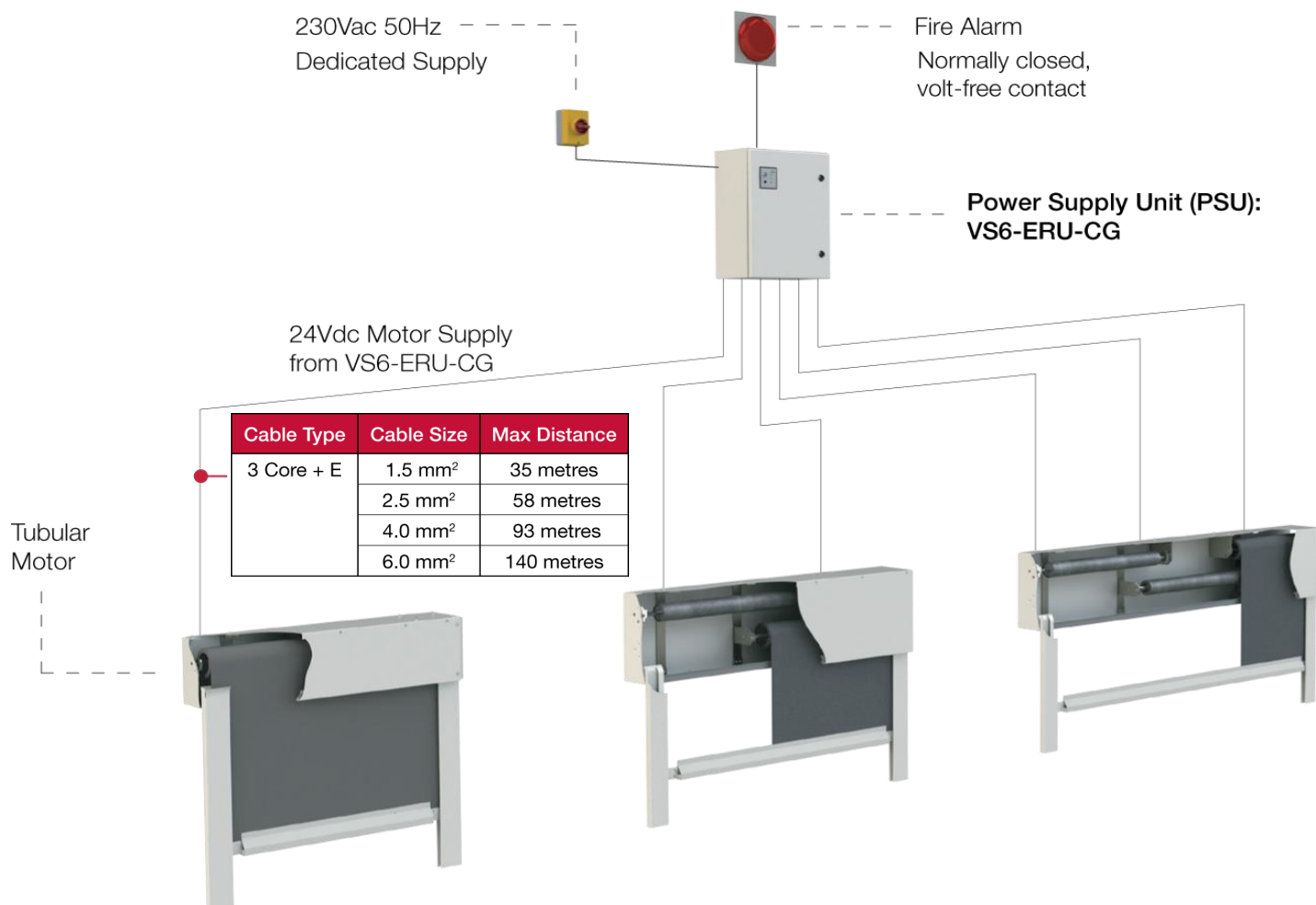
PSU Reference	Cabinet Size (mm)	Static Load (W)	Maximum Load (W)	Approx. Unit Weight (kg)
ERU1	500 x 400 x 210	20	170	17
ERU2	500 x 400 x 210	26	300	18
ERU3 – BS 8524	600 x 600 x 210	32	450	30
ERU3 – Standard/Export	500 x 400 x 210	32	450	19
ERU4 – 6	600 x 600 x 210	50	1000	35
ERU7 – 8	800 x 600 x 250	62	1000	50
ERU9	800 x 600 x 250	68	2000	65
ERU10 – 16	1200 x 800 x 300	110	2000	100
ERU17 – 18	1200 x 800 x 300	122	3000	115
ERU19+	Contact Coopers Fire for information			

Table 1

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

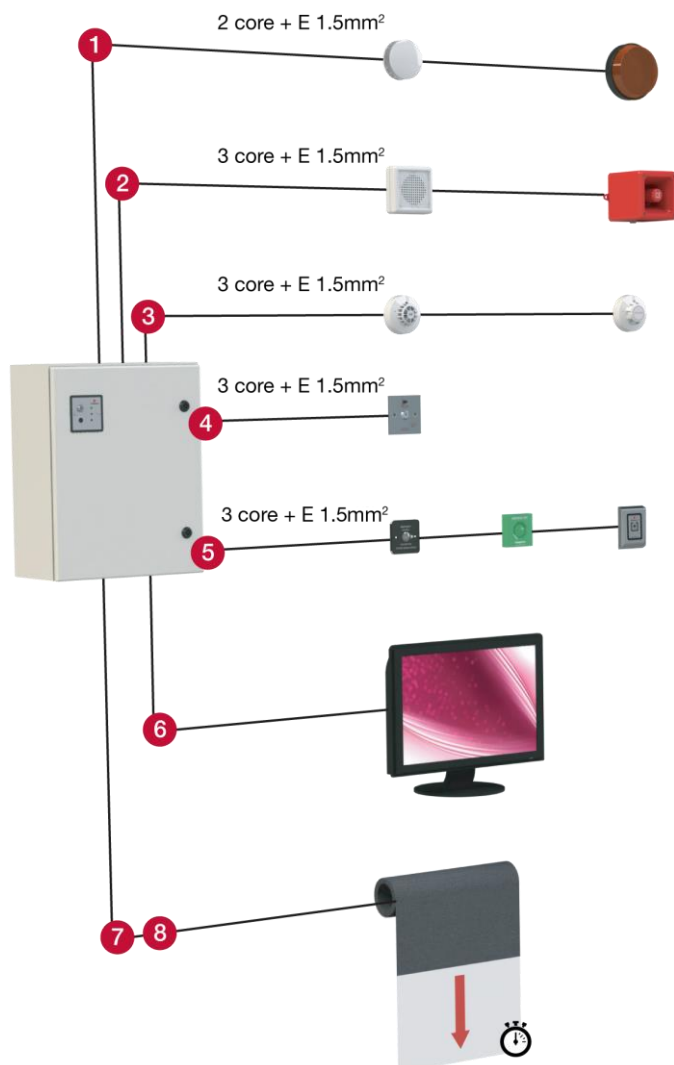
### FIELD WIRING MINIMUM FP200 RATING

### CONTROLS – OPTIONAL EXTRAS MATRIX



# VARIOSPEED 6 EMERGENCY RETRACT UNIT – CONTROLS GROUPED (VS6-ERU-CG)

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](http://www.coopersfire.com)

# VIROSPEED 6 EMERGENCY RETRACT UNIT – CONTROLS GROUPED (VS6-ERU-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 Kit CF000566	1 x PZUE PCB per BBU/ERU	✓	✗	✗	✗	✗
	Curtain Status BMS	BMS03 Kit CF000394	1 x BMS03 Kit per curtain	✗	✓	✓	✓	✗
	Battery Monitoring BMS	SLAM Kit CF000288	1 x SLAM PCB per BBU/ERU	✗	✗	✗	✗	✓
	Full BMS	PZUE Kit CF000566  BMS03 Kit CF000394  SLAM Kit CF000288	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  
Ignis House,  
Houghton Avenue,  
Waterlooville, Hampshire  
PO7 3DU.  
United Kingdom

Coopers Fire Ltd has a policy of continuous product improvement. As such we reserve the right to change design and specifications without prior notice.

**Phone:** +44 (0)2392 454 405  
**Email:** [info@coopersfire.com](mailto:info@coopersfire.com)  
**Web:** [www.coopersfire.com](http://www.coopersfire.com)

Please check our website for the latest information

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