



GVR Recloser

For Pole Mounting and Substation Applications

The father of modern switchgear, Hawker Siddeley Switchgear's world renowned GVR Recloser was the first in a range of equipment utilising one of the most advanced operating mechanisms available on the market today – Hawker Siddeley Switchgear's 'Fit & Forget' Technology, featuring the award winning magnetic actuator.

The GVR provides 'intelligent control' and protection on power distribution networks, whilst offering a lifetime of trouble-free service.

Key Features

- » Superior, proven 'Fit & Forget' technology with minimal maintenance;
- » The Hawker Siddeley Switchgear's patented, single coil magnetic actuator mechanism allows the GVR to operate independently of the MV supply;
- » Environmentally friendly vacuum interruption produces no by-products;
- » The lightweight corrosion resistant aluminium tank makes the GVR easier to transport and install;
- » The EPDM or silicone bushings are tested for tracking and erosion to IEC 61109 and are resistant to damage from vandalism or mishandling;
- » Endurance tested to 10,000 operations;
- » Pole mounted or substation mounted, the GVR can be integrated into the most advanced distribution automation schemes, or can operate as a stand-alone recloser;
- » By using the advanced control and protection functions of the Beckwith M-7679, the GVR can also be used in applications where reclosers have not traditionally been used such as closed rings and underfrequency load shedding schemes;
- » The 3-in-1 Recloser – the GVR can be configured to function as a Switch, Sectionaliser or Recloser by using one of the specially pre-engineered protection and control cubicles.



The GVR automatic recloser is now available as a tank only option for those customers who wish to connect their own protection and control cubicles. Alternatively, customers looking for a ground-mounted solution can select our epoxy separable bushings for cable connected networks.

RATINGS

		GVR 15	GVR 27	GVR 38
Maximum System Voltage	kVrms	15.5	27	38
Continuous Current	A	630	630	630
Interrupting Current	kA	12.5/16	12.5	10
Impulse Voltage Withstand	kV peak	110	125/150	150 (internal) 170 (external)
Power Frequency Withstand Dry	kVrms for 60secs	50	60	70
Power Frequency Withstand Wet	kVrms for 60secs	50	50	60
Rated Gas Pressure for above		Atmospheric	Atmospheric/0.3 bar*	0.3 bar (gauge)
Number of Operations with no Maintenance		10,000	10,000	10,000
Weight	kg	145	145/155*	155

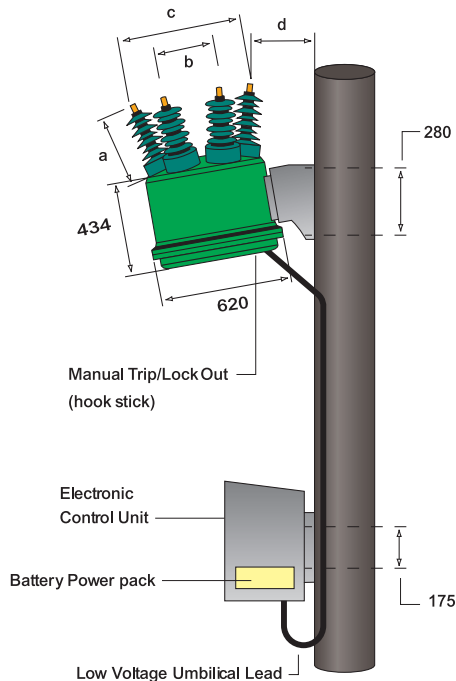
* Ratings for 150kV impulse version

HAWKER SIDDELEY SWITCHGEAR

a **BRUSH** company

DIMENSIONS (In mm)

Voltage	Creepage	a	b	c	d
Up to 27kV	830	369	286	571	298
38kV	1178	469	312	623	272



GVR Engineering Detail

- ① Single piece, aluminium or copper-cored EPDM or silicone rubber bushings, with grooves to take optional wildlife guards/MV boots. Epoxy separable bushings also available.
- ② Current transformers are mounted within the tank's controlled environment, while optional capacitive voltage dividers provide voltage signals for use by the control relay or an RTU
- ③ Aluminium housing with lightweight, moulded baseplate, secured by stainless steel bolts and incorporating rubber 'O' ring seals.
- ④ Pressure-relief disc, to comply with IEC 60298, offering the highest levels of safety.
- ⑤ Mechanical ON/OFF position indication visible through clear viewing window from ground level.
- ⑥ Hook stick-operated manual trip and lockout control.
- ⑦ A single moulding supports the three phase vacuum interrupter assembly, magnetic actuator mechanism and one-piece drive beam.
- ⑧ The patented, single coil magnetic actuator is based on a solenoid plunger, held in the tripped or closed position by a permanent magnet.

PROTECTION OPTIONS

» Polarr

The Polarr is the standard relay package for the GVR, offering full auto-reclose protection and control functionality.

» Beckwith

The Beckwith M-7679 Relay offers the optimum levels of advanced control and protection for distribution networks. Functions include directional protection, voltage synchronisation, load encroachment supervision and underfrequency load shedding.

» Other Options

Other relays options may be utilised to suit Customer specific needs. Contact HSL for further information.

Standards:

General - ANSI C37.60

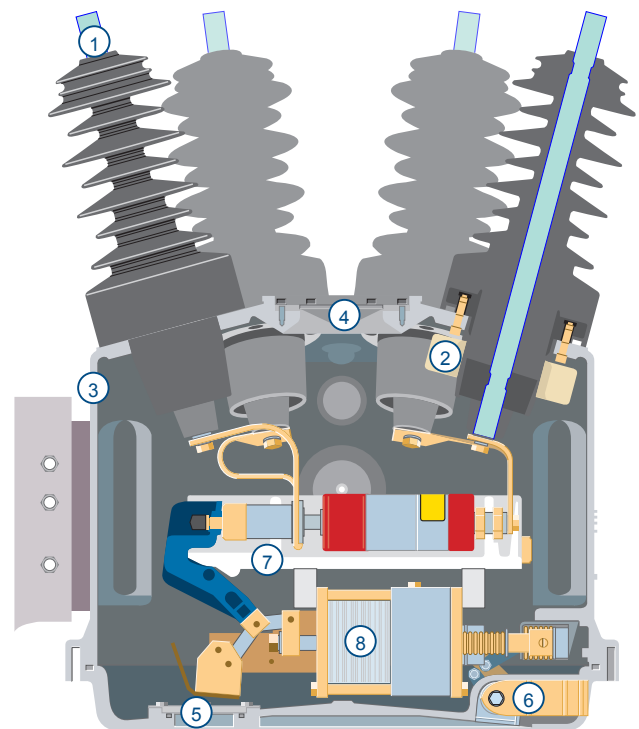
Electromagnetic - IEC 801

Protection - IEC 255

Patents

» GB2289374B

» EP 0 909 453 B1



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