Medium voltage products

HD4/R

SF₆ gas insulated medium voltage circuit-breaker for secondary distribution

- Rated voltage up to 36 kV, rated normal current up to 1250 A, rated breaking capacity up to 25 kA
- Soft quenching without chopping currents
- Fast recovery of the quenching media dielectric properties.
 Quenching technique free of re-strike and re-ignition
- Poles sealed for life
- Stored energy operating mechanism suitable for a complete O-C-O operating cycle without springs recharging
- Maintenance-free
- Application of the PR521 self-powered solid-state protection relay and sensors (up to 24 kV; on request)
- SF₆ pressure control set (on request)



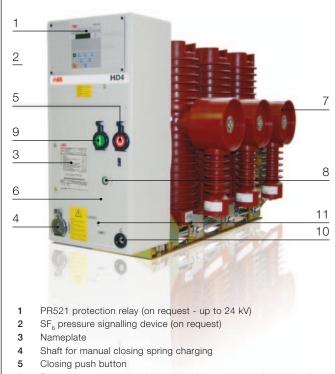


Technical data

Circuit-breaker			HD4/R 12			HD4/R 17			HD4/R 24			HD4/R 36		
Rated voltage / Rated insulation voltage	[kV]	12			17			24			36			
Withstand voltage at 50 Hz	[kV]	28			38			50			75			
Impulse withstand voltage	[kV]	75			95			125			175			
Rated frequency	[Hz]	50-60			50-60			50-60			50-60			
Rated normal current (40 °C)	[A]	630	800	1250	630	800	1250	630	800	1250	630	800	1250	
Rated breaking capacity / Rated admissible short-time current (3 s)	[kA]	12.5	-	-	12.5	-	-	12.5	-	-	12.5	12.5	12.5	
		16	16	16	16	16	16	16	16	16	16	16	16	
		20(2)	20	20	20(2)	20	20	20	20	20	-	-	-	
		25	25	25	-	-	-	-	-	-	-	-	-	
Making capacity	[kA]	31.5	-	-	31.5	-	-	31.5	-	-	31.5	31.5	31.5	
		40	40	40	40	40	40	40	40	40	40	40	40	
		50	50	50	50	50	50	50	50	50	-	-	-	
		63	63	63	-	-	-	-	-	-	-	-	-	
Operation sequence		O-3min-CO-3min-CO / O-0.3s-CO-15s-CO												
Opening time	[ms]	45			45			45			45			
Arcing time	[ms]	10-15		10-15			10-15			10-15				
Total breaking time	[ms]	55-60		55-60			55-60			55-60				
Closing time	[ms]	80		80			80			80				
Overall dimensions (fixed version)	H [mm]	770		770			770			770				
	L [mm]	286.5		286.5			286.5			286.5				
	P [mm]	1049-1189		1049-1189			1049-1189			1348				
Weight fixed version ⁽¹⁾	[Kg]	103			103			103			110			
SF ₆ gas pressure (rated service value)	[kPa]	380			380			380			380			
Technical catalogue	No.	649405		649405			649405			649405				

⁽¹⁾ Add 20 kg for PR521 and current sensors.

(2) 20 kA for 1 s.



Operating and signalling parts

6 Reset of protection circuit-breaker of geared motor (on request)

- Current sensors for PR521 (on request up to 24 kV) 7
- 8 Mechanical signalling device for circuit-breaker open/closed
- 9 Opening push button
- 10 Key lock (on request)
- Mechanical signalling device for closing springs charged/discharged 11

For more information please contact:

ABB S.p.A. **Power Products Division** Unità Operativa Sace-MV

Via Friuli, 4 I-24044 Dalmine Tel: +39 035 6952 111 Fax: +39 035 6952 874 E-mail: info.mv@it.abb.com

www.abb.it

The data and illustrations are not binding. We reserve the right to make changes in the course of technical development of the product.

© Copyright 2009 ABB. All rights reserved.

