

First Choice for reliable power distribution



Sentron 3VL

Moulded case circuit breaker

Answers for industry.



Typical applications

The different versions of 3VL MCCB are suitable for the following applications -

- Incoming and outgoing circuit breakers in power distribution applications.
- Switching and protection devices for motors, transformers, generators, capacitors, busbars and cables.



First Choice for reliable power distribution

Siemens with SENTRON 3VL moulded case circuit breaker offers reliable solution for all power distribution applications.

3VL MCCBs are modular in design, user friendly in planning and operations. Also ensures safety to plant and personnel in order to achieve high efficiency and productivity.

Highlights at a glance -

- Rated current from 16 to 1600A
- 3 Pole and 4 Pole
- Thermal Magnetic and Microprocessor based electronic trip units (ETUs)
- Communication capable ETUs
- No derating upto 50°C
- Current limiting
- Positive isolation
- Suitable for 90° offset mounting
- RCD module for residual current protection
- Mountings Standard fixed / Plug-in / draw out
- Manual operation with rotary handle / Motorized operation
- Interlocking of MCCBs using Castell locks / Bowden wire / Walking beam
- Easy site fitment of internal accessories, RCD module, Motorised unit

National / International standards and approvals

- IS 13947-1, IS 13947-2, IEC 60947-1, IEC 60947-2
- Ship building e.g. Lloyd's Register certificate, DNV certificate
- Special UL489 approved version New available
- 3VL MCCB also complies to RoHS (Restriction of Hazardous Substances)



SENTRON 3VL MCCB: Maximum versatility with minimum expenditure

Sentron 3VL circuit breakers meet the high requirements of power distribution systems through their compact and modular design, excellent technical characteristics, easy and flexible operations.

Advantages -

- Cost saving Compact design helps to save panel cost.
- **Time saving** 3VL offers quick installation by simple connection, Internal accessories fitment without special tool.
- Ease of maintenance Plug-in / draw-out version and also modular design helps for easy and fast maintenance.
- Easy Planning and assembly Modular design of 3VL MCCB offers different combinations for all power distribution applications. It also additionally offers integrated solutions by communication facility.
- 3VL MCCB is the **consistent solution** for future expansion / modernization due to modular design.
- System Solutions With the ability to communicate over common protocols, the 3VL integrates with the broader system giving the advantage of system monitoring capabilities along with cost effective installations.
- Integrated communication concept for all ETUs with PROFIBUS / MODBUS
- **Global range** Uniform design of 3VL MCCB helps to offer standard solution for various applications globally.

SENTRON 3VI. MCCB: Lower Costs. More Possibilities

The SENTRON 3VL MCCB is available in following versions -

Line protection

3VL MCCB is suitable for protection of cables, busbar wirings, lines against overload and short circuit faults.

Motor / generator protection

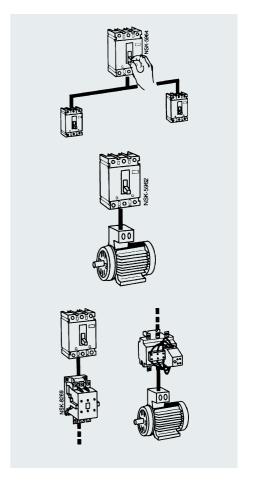
These 3VL MCCB releases are designed for optimal protection and the direct-starting of the squirrel-cage motors. Release is incorporated with phase loss sensitivity and a thermal memory which protect the motor against overheating. The selectable time lag class enables the user to select the overload release settings for the start-up conditions of the motor.

Starter combination

MCCB is used for both short circuit protection as well as for isolating function, which may be required in starter combination consisting of MCCB, overload relay and contactors. This MCCB is with adjustable instantaneous short circuit setting.

Non-automatic circuit breaker

These 3VL MCCBs are used as incoming circuit breakers, main switches or disconnectors without overload protection. These MCCBs are with fixed short-circuit releases so back-up fuses are not needed.



DC switching and protection

The VL160X to VL630 circuit breakers (for system protection with TM, for starter combinations, non-automatic air circuit breakers) can also be used for DC switching and protection applications.

As the current has to flow through all of the conducting paths, the following connections are recommended in order to satisfy the thermal tripping characteristics.

Recommended connection/l	Maximum permitted DC voltage U _e	Remarks				
Circuit A	Circuit B ¹⁾					
For 3- and 4-pole circuit bre	akers ²⁾³⁾					
250 V DC ⁴⁾ 1 L+ 3 5 L- 2 4 6 NSE0_00741a	500V DC ⁴⁾ N L+ 1 3 5 L- N 2 4 6	2-pole switching (non-grounded system) If there is no possibility of a ground fault, or if every ground fault is rectified immediately (ground-fault monitoring), then the maximum permitted DC voltage is 600 V for both circuits.				
500 V DC 1 L+ 3 5 L- 2 NSE0_00742a	600 V DC N L+ 1 3 5 L- 4 6	2-pole switching (grounded system) The grounded pole is always assigned to the individual conducting path, so that there are always 2 conducting paths in series in the event of a ground fault in circuit A and 3 conducting paths in series in the event of a ground fault in circuit B.				
600 V DC 1 L+ 3 5 2 4 6 NSE0_00743a	600 V DC N L+ 1 3 5 N 2 4 6	1-pole switching (grounded system) The grounded pole is assigned to the unconnected conducting path.				

- 1) Circuit B: A current reduction to 75 % is necessary with 4 conducting paths. The characteristic curve is also shifted by the greater temperature rise.
- 2) VL160X on request.
- 3) 4th pole (N) without overload and short-circuit releases, or 4th pole (N=100 %).
- With a non-grounded system, all poles must be disconnected.

Automatic transfer switch equipment (ATSE) for continuous power supply

Electrical Power is a life-line of any Industry. Key to economic success is a continuous availability of power. To ensure continuous supply of power we offer comprehensive solution with Automatic transfer switch equipment (ATSE).

Highlights

- Simple solution of an automatic system transfer to ensure continuous power supply in case of a power failure
- Cost-effective control unit by using standard products
- Expandable and flexible due to the use of logic module for controlling and monitoring the automatic transfer operation
- Easy handling with the help of text display
- Fulfills high demand of load transfer switch
- Clearly reduces overhead and time without using service engineers
- Optimum power management by the option of power shedding when switching to emergency power supply

For more information on ATSE solution please contact our sales office.





ETUs with superior features

The high-quality SENTRON 3VL microprocessor based ETUs comes with following features:

- No auxiliary voltage is needed for release system
- All ETUs have a thermal memory
- A flashing green LED indicates correct operation of the microprocessor
- Integrated self-test function
- Socket for tester
- Overload status is indicated by a permanently lit yellow LED (alarm)



Thermal Magnetic trip unit



Microprocessor based ETU



Microprocessor based ETU with LCD display

		Setting options							
Trip unit	Function type	Adj.	Short circuit	protection	Adj.	Adj.			
		overload protection	(Short time (Instant- delayed) aneous)		ground fault protection	N-conductor protection			
		L Ir = x In	S lsd = x lr	l li = x ln	G lg = x ln	N IN = x Ir			
М	1	-	-	✓	-	-			
TM	LI/LIN	✓	-	✓	-	_			
ETU10	LI/LIN	✓	-	✓	-	✓			
ETU12	LIG/LING	✓	-	✓	✓	✓			
ETU20	LSI/LSIN	✓	✓	✓	-	✓			
ETU22	LSIG/LSING	✓	✓	✓	✓	✓			
LCD ETU42	LSIG/LSING	✓	✓	✓	✓	✓			

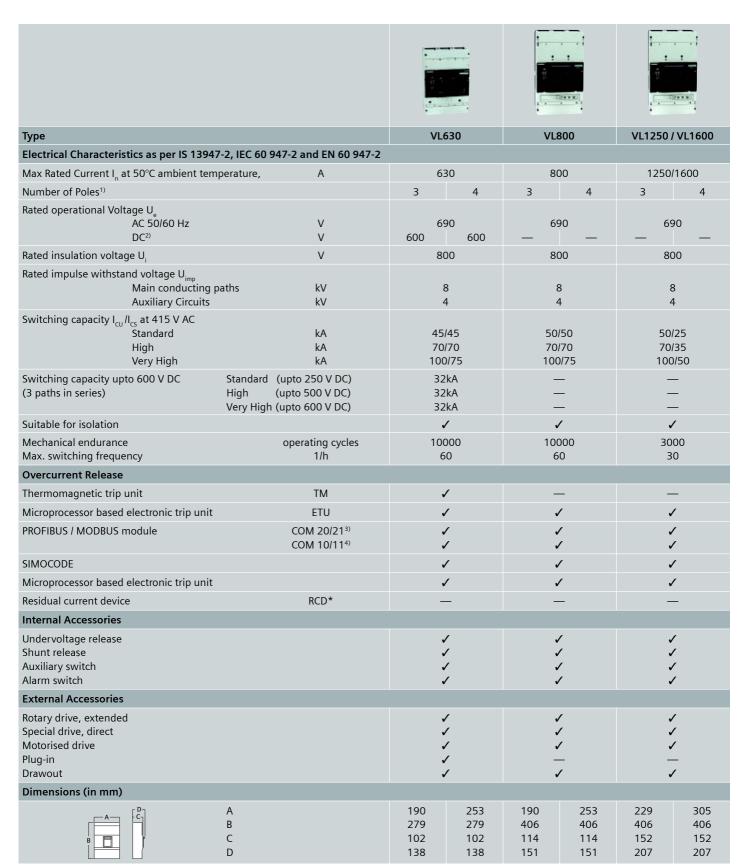
Technical Overview

Туре				VL160X		VL160 / VL250		VL400			
Electrical Characteristics as per IS 1394			2								
Max Rated Current I _n at 50°C ambient tem	perature,	A		160			50/25		_	400	
Number of Poles ¹⁾			3		4	3		4	3		4
Rated operational Voltage U_e AC 50/60 Hz $DC^{2)}$		V V	500	690	500	600	690	600	600	690	600
Rated insulation voltage U _i		V		800			800			800	
Rated impulse withstand voltage U _{imp} Main conducting p Auxiliary Circuits	aths	kV kV		8 4			8			8 4	
Switching capacity I _{CU} /I _{CS} at 415 V AC Standard High Very High		kA kA kA		55/55 70/70 100/75		7	55/55 70/70 00/75			55/55 70/70 100/75	
Switching capacity upto 600 V DC (3 paths in series)	High	(upto 250 V DC) (upto 500 V DC) (upto 600 V DC)		30kA 30kA —		32kA 32kA 32kA		32kA 32kA 32kA			
Suitable for isolation	uitable for isolation			✓		✓		✓			
Mechanical endurance operating cycles Max. switching frequency 1/h			20000 120		20000 120		20000 120				
Overcurrent Release											
Thermomagnetic trip unit		TM		✓			✓			✓	
Microprocessor based electronic trip unit		ETU		_		✓		✓			
PROFIBUS / MODBUS module		COM 20/21 ³⁾ COM 10/11 ⁴⁾				√ ✓		√ ✓			
SIMOCODE				✓		✓		✓			
Microprocessor based electronic trip unit				_		✓		✓			
Residual current device		RCD*		✓		✓		✓			
Internal Accessories											
Undervoltage release Shunt release Auxiliary switch Alarm switch				√ √ √			\ \ \ \			\ \ \ \ \ \ \ \	
External Accessories											
Rotary drive, extended ipecial drive, direct Motorised drive Plug-in Drawout			✓ ✓ ✓ —		\frac{\frac}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}		<i>y y y y</i>				
Dimensions (in mm)											
B D C	A B C D		105 157 81 107	,	139 157 81 107	105 175 81 107		139 175 81 107	139 279 102 138		183 279 102 138

¹⁾ For information about 1 and 2 pole MCCB, please contact our sales office

Applicable to Thermalmagnetic MCCBs only.
 For ETU10/ETU12/ETU20/ETU22

upto 400A for 4P & upto 250A for 3P



¹⁾ For information about 1 and 2 pole MCCB, please contact our sales office

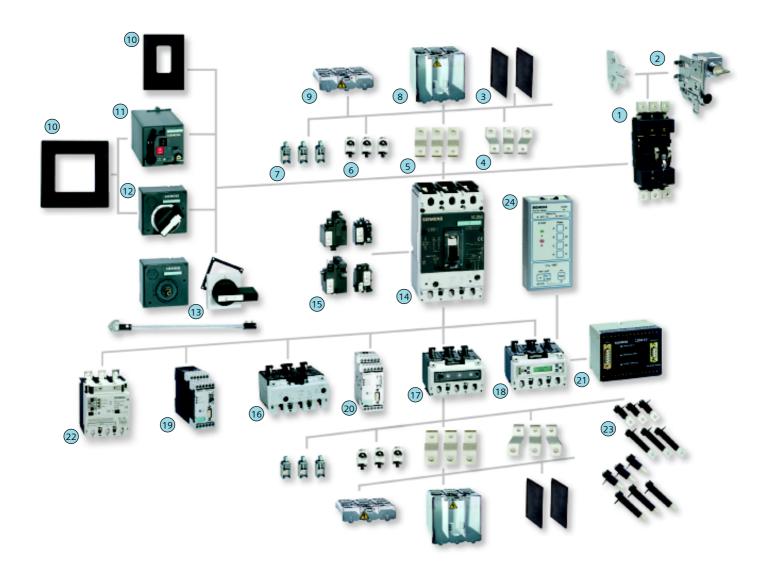
²⁾ Applicable to Thermalmagnetic MCCBs only.

For ETU10/ETU12/ETU20/ETU22

⁴⁾ For ETU42

^{*} upto 400A for 4P & upto 250A for 3P

SENTRON 3VL MCCB range



- 1 Withdrawable/plug-in base
- Withdrawable side parts
- 3 Phase barriers
- 4 Spread links
- (5) Straight connecting bars (extension links)
- (6) Multiple feed-in terminal
- (7) Box terminal
- 8 Extended terminal cover
- 9 Standard terminal cover
- (10) Cover frame for door cutout
- 11) Motorized drive (stored energy operator)
- (12) Rotary drive direct type

- 13 Rotary drive extended type
- 14) SENTRON 3VL circuit breaker
- 15) Internal accessories
- 16 Thermal-magnetic trip unit
- 17 Microprocessor based ETU
- 18 Microprocessor based ETU with LCD display
- 19 Simocode Pro
- 20 COM20/21 communication module for PROFIBUS / MODBUS
- 21) COM10/11 communication module for PROFIBUS / MODBUS
- 22) RCD module
- 23) Rear connection, flat and round
- 24 Manual tester for microprocessor based ETU

Internal Accessories

Only two groups of internal accessories cover the entire product range.

Family I

VL160X







VL250



VL400





VL630



VL800 VL1250



VL1600

Undervoltage Release

If there is no voltage present, closing of the circuit breaker is not possible. If voltage is not applied to the releases, operation of the circuit breaker will result in no-load switching.

All undervoltage releases are designed and tested so that they meet all applicable requirements in accordance with IEC 60947 (drop-out voltage 0.70 to 0.35 Ue, response voltage 0.85 to 1.10 Ue).

Shunt Release

The shunt release is used for remote tripping of the circuit breaker.

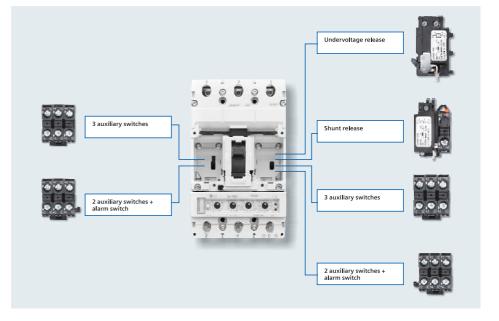
These devices operate according to IEC 60947 (tripping voltage 0.70 to 1.10 Ue).

Auxiliary Switch

Auxiliary switches are used for indication and control. The contacts of the auxiliary switch close and open together with the main contacts.

Alarm Switch

The alarm switches (AS) are activated when the circuit breaker has been tripped due to an overcurrent e. g. overload or short-circuit. However, they are also activated if the circuit breaker has been tripped by a shunt release or undervoltage release





External Accessories

Rotary Operating Mechanism

Front-operated rotary operating mechanisms

These operating mechanisms have been designed for direct mounting to the circuit breaker and change the toggle lever movement from a linear to a rotary motion.

Extended type / Door-coupling rotary operating mechanisms (complete operating mechanisms)

Extended type / Door-coupling rotary operating mechanisms and removable covers are available for circuit breakers which are installed into control cabinets and distribution boards. These are supplied as complete assembly kits, including an articulated-shaft mechanism.

With regard to the switching status indication and the "RESET" position, the same applies to the rotary operating mechanisms as to the toggle lever. The position of the operator lever (knob) indicates the status.

Motorized Operating Mechanism

The SENTRON VL160X to VL1600 circuit breakers (sizes 160 to 1600 A) can be equipped with motorized operating mechanisms for remote opening and closing during operation.

For SENTRON VL160X circuit breaker, there is motorized operating mechanism without a stored-energy feature for remote controlled ON and OFF switching.

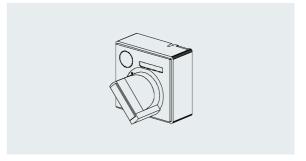
All motorized operating mechanisms are always supplied with a locking device for padlocks. Optional safety locks are also available for motorized operating mechanisms with stored-energy feature.

RCD (Residual Current Device)

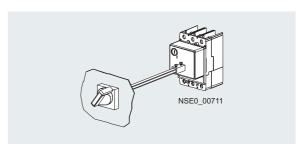
- Residual current 0.03 to 3.0A
- Delay 0.06 to 1.0 sec
- 16 to 400A *
- · Can be used only for TM trip units, starter, disconnecting switch
- Level of fault current displayed by LED
- Incoming supply from top or bottom
- Remote OFF (starting with VL160), corresponds to function of shunt trip
- · Suitable for pulsating DC current

Plug-in / Withdrawable Version

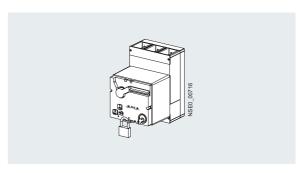
The fixed-mounted circuit breaker is the basic version. This can be converted very easily into a plug-in or withdrawable version with the aid of the appropriate assembly kit.



Front-operated rotary operating mechanisms

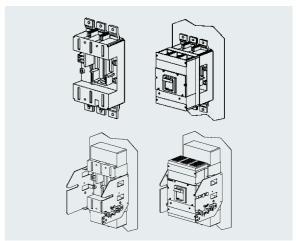


Extended type rotary operating mechanisms



Motorized Operating Mechanism





 ⁴Pole version upto 400A
 3Pole version upto 250A

Communication unlimited

Whether in commercial buildings or in production plants – often, it is decisive to know everything that is happening in the power distribution system in just seconds.

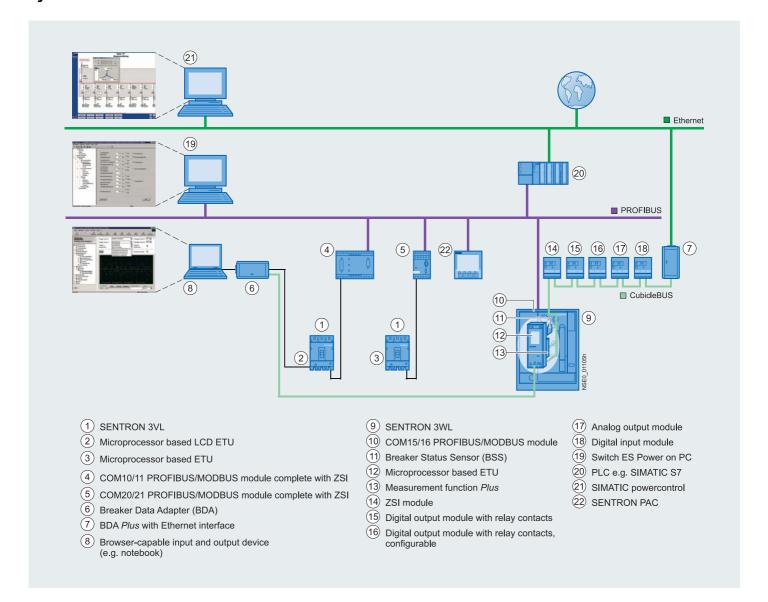
The use of modern communication-capable circuit breakers opens up completely new possibilities in terms of start-up, parameterization, diagnostics, maintenance and operation. This allows many different ways of reducing costs and improving productivity in industrial plants, buildings and infrastructure projects to be achieved:

- Fast and reliable parameterization
- Timely information and response can prevent plant stoppages
- · Effective diagnostics management

Measured values are the basis for efficient load management, for drawing up power demand profiles and for assigning power to cost centers.

Sentron 3VL has all of the functionality to provide you with this capability. It is suitable for communication applications via PROFIBUS and MODBUS.

System architecture of the SENTRON circuit breakers



Communication unlimited

Multiple communication option

- 3VL ETU42 with LCD display MCCBs with COM10 for PROFIBUS and COM11 for MODBUS
- 3VL ETU10/12/20/22 MCCBs with COM20 for PROFIBUS and COM21 for MODBUS
- 3VL Thermal Magnetic MCCBs with SIMOCODE Pro

	Data transmission through COM10/11	Data transmission through COM2O/21	Data transmission through SIMOCODE Pro
Transmittable data			
Commands Switch ON/OFF Alarm and tripping memory, min./max. measured values and maintenance information	✓ ✓	✓ ✓	✓ -
Operating status ON or OFF status trip position	✓	✓	✓
Event signals Tripped signals with tripping current Alarm signals (e. g. overload) Threshold value warning (e. g phase currents)	✓ ✓ ✓	✓ ✓ ✓	- ✓
Measured values Phase currents and neutral conductor current Voltages, power	✓ -	√ -	✓ ✓
Parameter values Read and write Set values for SIMOCODE Pro	√ -	√ -	- ✓
Maintenance Information (e.g. number of tripping operations, number of switching operations)	✓	√	-
Device Identification data Time synchronization	✓ ✓	✓ ✓	-







COM10/11 COM20/21 SIMOCODE Pro

Communication unlimited

New concept

Communication with COM20 and COM21 modules

The new COM20/21 modules also offer efficient and reliable system operation. All ETU versions with COM20 / 21 are able to consistently communicate via PROFIBUS/MODBUS. Whether switch state, tripping cause, warning messages, current measuring, event log, switching cycles or device control. The cost- and function-optimized COM20/21 modules reliably transmit all important information to ensure the maximum transparency of your system's state at all times.

Advantages of the new COM20/21 Modules:

- · Improved efficiency and cost savings
- Universal applicability integrated communication is even supported by the most cost-favorable ETU
- Easier installation through optimized ETU connection
- Maximum flexibility through smaller design for optimized control cabinet space
- Particularly uncomplicated through elimination of auxiliary and alarm switch wiring to the communication module

Power Management with SENTRON

Highlights -

- Control (ON/OFF) from PLC/DCS/BMS through PRPFIBUS/MODBUS
- Transmission of device status (ON, OFF & Trip)
- Monitoring of measured values (Current, Voltage, Power, Energy etc from PLC/DCS/BMS)

Benefits -

- · Efficient energy management
- Faster communication
- High efficiency
- High accuracy
- Simple configuration and easy installation
- Easier fault diagnosis

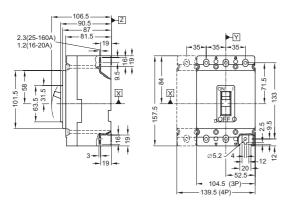




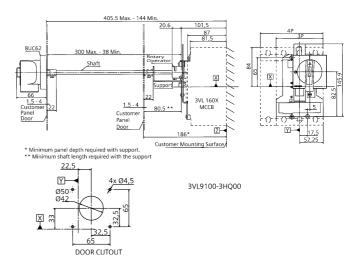
Dimensions

3VL 160X 3P/4P

Fixed version



MCCB with extended type rotary handle



3VL160 / 250 3P/4P

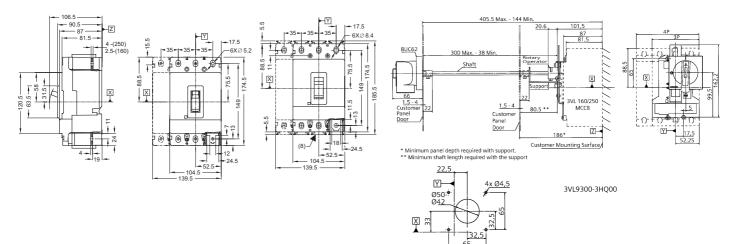
Fixed version

3VL160/250

3VL160

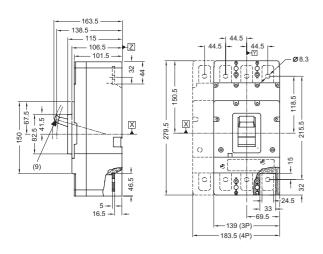
3VL250

MCCB with extended type rotary handle



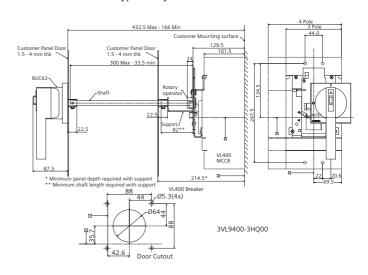
3VL400 3P/4P

Fixed version



MCCB with extended type rotary handle

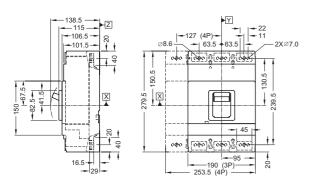
DOOR CUTOUT



Dimensions

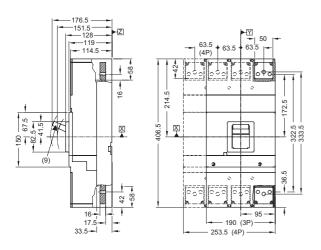
3VL 630 3P/4P

Fixed version



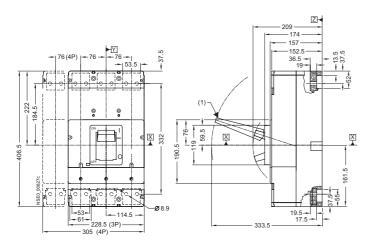
3VL800 3P/4P

Fixed version

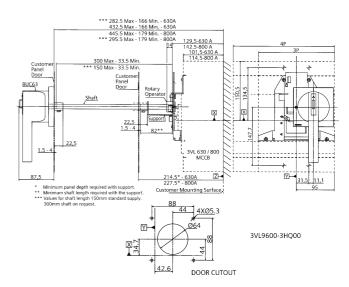


3VL 1250 / 1600 3P/4P

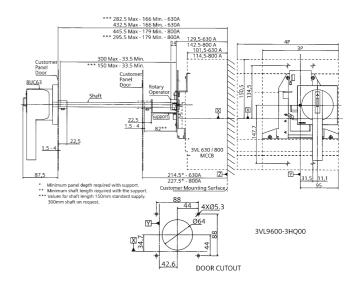
Fixed version



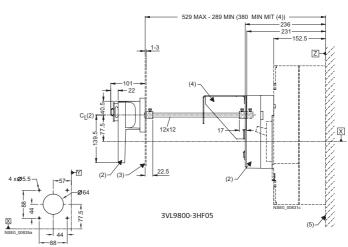
MCCB with extended type rotary handle



MCCB with extended type rotary handle



MCCB with extended type rotary handle



Your partners

Sales offices:

Ahmedabad

3rd Floor, Prerna Arbour Girish Cold Drinks Cross Roads, Off. C. G. Road Ahmedabad - 380009

2: +91 79 40207600 Fax: +91 79 40207699

Bangalore

1st Floor, Jyothimahal, #49, St. Marks Road Bangalore - 560001 **☎**: +91 80 22042000 Fax: +91 80 22224131

Chandigarh

SCO 189 - 191, 3rd Floor, Sector 17C

Chandigarh - 160017 **≅** : +91 172 4690300 Fax: +91 172 4690399

Territory managers:

Aurangabad

A9, Yogeshwari Vrundavan Nr. Malhar Chowk, Garkheda Parisar, Prema Nagar Aurangabad - 431210, Maharashtra Mobile: +91 9766316446 E-mail: santosh.rajhans@siemens.com

Bareilly
Bareilly - 243001, Uttar Pradesh
Mobile: +91 9415012500
E-mail: saket.dwivedi@siemens.com Mobile: +91 9897070133 E-mail: naveen.khare@siemens.com

Baroda

1st Floor, Vaniiya Bhavan, Race Course Road

E-mail: ankur.chokshi@siemens.com

Belgaum

H.No.713, Narvekar Lane, Shahpur Belgaum - 590003, Karnataka 2 & Fax++91 831 2495156 Mobile: +91 9740277991 E-mail: anand.gawade@siemens.com

Bhilai

C/o Mr. S.H Siddiqui Sector-1, Street-9, Quarter No 1A Bhilai - 490001, Chhattisgarh Mobile: +91 9826127525 E-mail: sandeep.barde@siemens.com

Bhubaneswar

109, Harapriya Apartment, Vivekananda Marg Bhubaneswar - 751002, Orissa

≅:+91 674 2430734 Mobile:+91 9937009749 E-mail: anirban.aditya@siemens.com Mobile: +91 9937097504 E-mail: sumit.sengupta@siemens.com

Dist : Kozhikode, Calicut - 673001, Kerala Mobile: +91 9895052944 E-mail: sreekanth.p@siemens.com

Cochin

KG Oxford Busienss Centre 39/4609, Third Floor, SreekandathRoad, Ravipuram Cochin - 682016, Kerala

☎: +91 484 4028611, 22 Fax: +91 484 2380201 Mobile: +91 9744511109 E-mail: sajeen.s@siemens.com

Deharadun

122, Vihar Lane No 1, Ajabpur Kalan Deharadun - 248001, Uttaranchal Mobile: +91 9760033117 E-mail: manish.bajpai@siemens.com

Durgapur

4/6, Matangini Hazra Bithi, Ground Floor, City center Durgapur - 713216, West Bengal ☎ : +91 343 2605286

Mobile: +91 9830185007 E-mail: sourav.paul@siemens.com Chennai

4, Mahatma Gandhi Road, Chennai - 600034

2:+91 44 28334000 Fax: +91 44 28334088

Coimbatore

7th Floor, East Wing, Global Towers 1057, Avinashi Road, Coimbatore - 641018

≅:+91 422 4336300 Fax:+91 422 4336310

Hvderabad

5-9-19, Lakshmi Narsinh Estate, 4th Floor Secretariat Road, Opp. Secretariat, Saifabad Hyderabad - 500004

2: +91 40 23482500 Fax: +91 40 23243145

Faridabad

House No 237, Sector-B Faridabad - 121006, Haryana Mobile: +91 987396350

Gurgaon

117-C, First Floor, Sector-30, Behind Jalvayu Vihar Gurgaon - 122001, Haryana Mobile: +91 9971091588 E-mail: siemens.ggn@gmail.com

Guwahati

G1, Hill View Apartment, Navagraha Path Chenikuthi Hill Side, Guwahati - 781003, Assam

☎: +91 361 2663988 Mobile: +91 9864037562 E-mail: sourav.bhattacharya@siemens.com Mobile: +91 9864110684

E-mail: biplab.datta@siemens.com

Hardwar

758, 1st Floor, Model Colony, Awas Vikas, Jwalapur Hardwar - 249407, Uttarakhand Mobile: +91 9897070133 Fax: +91 1334 265491 F-mail: naveen.khare@siemens.com

Indore

Indore - 452001, Madhya Pradesh Mobile: +91 9823011883 E-mail: vineet.saxsena@siemens.com

Jaipur

6, Park Street, Opp Pink City Petrol Pump, M.I.Road

Jaipur - 302006, Rajasthan **≅**: +91 141 2370274 / 2377956

Fax: +91 141 2370482 Mobile: +91 9829244313

E-mail: peeyush.gupta@siemens.com

Jalandar

H.No 448R, First Floor, Pushpa Niwas Near Geeta Mandir, Model Town Jalandar - 144001, Punjab Mobile: +91 9779194445 E-mail: sunil.singla@siemens.com

Jamshedpur

823, Udaigiri, Vijaya Heritage, Uliyan, Kadma Jamshedpur - 831005, Jharkhand

≅:+91 657 6451637 Mobile:+91 9934311352

E-mail: shaibal.parial@siemens.com

Jodhpur

371, Gauri House, Kamala Nehru Nagar Near SBI Bank, Jodhpur - 342008, Rajasthan Mobile: +91 9828327200 E-mail: naveen.sahariya@siemens.com

Kanpur

106, Agarwal Aparment Near Hari Har Dham Mandir, Shyam Nagar Kanpur - 208013, Uttar Pradesh ☎ & Fax: +91 512 2423348

Mobile: +91 9839102434

Kolkata

43 Shanti Palli, R B Connector Eastern Metropolitan Bypass, Kolkata - 700042 ☎ : +91 33 24449000, 24428641-47

Fax: +91 33 24449010 / 13

Lucknow

28/45, Ashok Marg, Opposite Indira Bhawan Lucknow - 226001

: +91 522 4031022, 4031000

Fax: +91 522 4031019

Mumbai

130, Pandurang Budhkar Marg, Worli Mumbai - 400018

☎:+91 22 24987000-02 Fax: +91 22 24987312

Kolhapur

Sursati Mahabharat Apt., Flat No. 101, 1st Floor C.S. NO. 250B / 22, Nr.Mahavir Garden to College

Main Road, Kolhapur - 416003, Maharashtra **☎**: +91 231 2663330 Mobile: +91 9881465421 E-mail: sachin.chavan@siemens.com

48, Model Town, Khedli Phatak Kota - 324002, Rajasthan

Mobile: +91 9784842605 E-mail: ajit.parashar@siemens.com

Ludhiana

H.No 3746, First Floor, Sector 32-A Chandigarh Road, Ludhiana - 141010, Punjab Mobile: +91 9872317702

E-mail: rajeev.kapoor@siemens.com

Ludhiana

H.No 92, Lajpat Nagar, Near Bus Stand Ludhiana - 141010, Punjab ☎: +91 161 2770574 Mobile: +91 9815502480 E-mail: rohit.jagga@siemens.com

Madurai

8/12, Ground Floor, Sakhti Vellammal Street SS Colony, Madurai - 625010, Tamilnadu Mobile: +91 9894617780 E-mail: mahendiran.murugan@siemens.com

Nashik

Flat No 2, Shivam Park, Rajiv Nagar Rane Nagar, Nasik-Mumbai Highway Nashik - 422009, Maharashtra Mobile: +91 9822193204 E-mail: kiran.vaidya@siemens.com

Pondicherry

32, Second Floor, St. Theresa Street Pondicherry - 605001 : +91 413 4500101 Mobile: +91 9840472727

E-mail: elankumarak.pandian@siemens.com

Raipur

Flat No.103, First Floor, Block B, Shilp Enclave Near LAS Colony, Shankar Nagar Raipur - 492007, Chhattisgarh Mobile: +91 9425057945 E-mail: brajesh.rathor@siemens.com

Raikot

D-3 Aalap Century, University Road Rajkot - 360005, Gujarat Mobile: +91 9825506962 E-mail: bhushan.sawant@siemens.com

Ranchi

H-1/187, Harmu Housing Colony, Harmu Ranchi - 834002, Jharkhand Mobile: +91 9234610953 E-mail: sourav.dasgupta@siemens.com

Renukoot Above ICICI Prudentail Office, Patel Nagar

Murdhawa, Dist-Sonebhadra Renukoot - 231217, Uttar Pradesh Mobile: +91 9838007897 F-mail: siemens_upeast@sifv.com

Nagpur 5th Floor, Landmark Building, Ramdas Peth

Nagpur - 440010 ☎ : +91 712 6633000 Fax: +91 712 6633111

New Delhi

4A, Ring Road, I.P. Estate, New Delhi - 110002

☎:+91 11 42995000-09 Fax:+91 11 42995030

Pune

Tower B / 701 - 705, ICC Trade Tower 403A, Senapati Bapat Road, Pune - 411016 **≅**: +91 20 2570 6000

Fax: +91 20 2570 6060

Rourkela

T-15, Civil Town, Rourkela - 769004, Orissa ☎ : +91 661 2400880

Mobile: +91 9437041724

E-mail: sanjoy.ganguly@siemens.com

Salem

3/25 Santosh Nagar, PACB Backside Chinnathirupathi, Salem - 636008, Tamilnadu Mobile: +91 9894617772 E-mail: rubengerald@siemens.com

Sambalpur

Pradhan Para, Near Jamkani Mandir Beside LIC Div Off, Ainthapalli Sambalpur - 768004, Orissa ☎: +91 663 2541258 Mobile: +91 9438529778

E-mail: samir.chaintak@siemens.com

Surat

59, Ground Floor, Shreejinagar Part-1 Dhabholi Char Rasta, Ved Road, Katagram Surat - 395004, Gujarat

Mobile: +91 9925001779

E-mail: chandrakant.keshrani@siemens.com

Tiruchirappali

T3, 3rd Floor, Vishranthi Daffodils Apartments Old Friends Eye Hospital, Puthur Old Friends Eye Hospital, Puthur Tiruchirappali - 620017, Tamilnadu & Fax: +91 431 4030390 Mobile: +91 9444911221 E-mail: akhilesh.nair@siemens.com

Trivendrum

Sonu, TC9/2082, 5, Thamarakulam Lane Sathamangalam, Trivendrum - 695010, Kerala Mobile: +91 9895979604 E-mail: jonsa-82@yahoo.com

Udaipur

303, Oasis Park, PP Singhal Marg, Ambavgarh Udaipur - 313001, Rajasthan **2** & Fax: +91 294 2430345

E-mail: ankur.singh@siemens.com Vapi

Flat No. 302, Samrajya IV, Royal Residency Charwada Road, Vapi - 396195, Gujarat

≅: +91 260 6451156 Mobile: +91 9825147957 E-mail: siemens_vapi@sancharnet.in

Mobile: +91 9829039120

Vijayawada

G-2, Shreya Tower, Moghalrajapuram Near Jammichettu Centre Vijayawada - 520010, Andhra Pradesh 2: +91 866 6629933 Mobile: +91 9866463639

E-mail: santosh.p@siemens.com Visakhapatanam

84, Mount Moriah Residency, Waltair Uplands Visakhapatanam - 530003, Andhra Pradesh ☎:+91 891 2712535 Mobile:+91 9849212555 E-mail: siemensvaizag@rediffmail.com

Siemens Ltd. **Industry Sector** LV Control & Distribution Products Thane Belapur Road, Thane 400601 Fax: +91 22 27623729 E-mail: lvsgr-mktg.india@siemens.com Order No.: 102262281 SGR-01-115-022 (This replaces SGR-01-115-007)

Customer Care Toll free no. 1800 220 987 Email: adscs.india@siemens.com

Product upgradation is a continuous process. Hence, data in this catalog is subject to change without prior notice. For the latest information, please get in touch with our Sales Offices.