

ACDC™

DYNAMICS
www.acdc.co.za

AuCom

VAGON *Danfoss*



Redefining Optimum Process Control...

DRIVES & SOFTSTARTERS

Why not make life easier, right from the start?

T H I N K E L E C T R I C A L

INDEX

VARIABLE SPEED DRIVES

DANFOSS VLT® MICRO DRIVE FC 51

2

The VLT® Micro Drive FC 51 is small and yet powerful and built to last.

DANFOSS VLT® DECENTRAL DRIVE FCD 302

2

Designed for simplicity and robustness, the VLT® Decentral Drive FCD 302 is a user-friendly product with high performance and a strong protection degree.

DANFOSS VLT® HVAC DRIVE FC 102

3-4

This tough and savvy FC102 drive enhances pump and fan applications in building management systems, and runs outdoors in most mates.

DANFOSS VLT® AQUA DRIVE FC 202

4-6

Intelligence embedded in the VLT® AQUA Drive FC 202 automatically defines baseline parameters for water and wastewater applications, at all speeds and real-life operating cycles.

VACON® 20

7-8

Compact, but packed with programming functionality that's ideal for OEM applications.

VACON® 100 INDUSTRIAL

10-12

One drive for a wide range of applications. VACON® 100 INDUSTRIAL is full of features and dedicated for a wide range of constant power/torque applications.

VACON® 100 FLOW

9, 11, 15

An AC drive that is dedicated to improving flow control and saving energy in industrial pump and fan applications.

VACON® 100 X AND VACON 20 X

12

A drive for indoor and outdoor applications that withstands high pressure and vibration levels, water, heat and dirt

VACON® NXP AIR COOLED

13-14

Designed for a broad range of demanding applications, focusing on higher power sizes and system drives.

VACON STANDALONE DRIVES

12, 15

Designed to meet the most demanding requirements and tailored to match your specific application.

FU9000D

16

FU9000D series VFD is a high performance, open loop inverter suitable for all kinds of general purpose industrial control applications.

FU9000SI

16

The FU9000SI solar pumping inverter is fully automatic, with MPPT built-in for maximum pumping efficiency.

SOFT STARTERS

AUCOM CSXI

17

Compact Low Voltage Soft Starter.

AUCOM EMX3

17

The EMX3 is a comprehensive motor management system for the most demanding soft starting and stopping applications.

AUCOM EMX4

18

The EMX4i is smaller, more powerful and packed with new control and protection features. It also introduces the game-changing Smart Card capability.

AUCOM L-SERIES

19

Medium Voltage Soft starters.

DANFOSS VLT® SOFT START CONTROLLER MCD 100

20

An extremely cost-effective and compact soft starter that provides basic soft start and stop functionality and easy DIN rail mounting.

INTEGRA ENERGY SAVING SOFT STARTERS

20

Ensuring your motors only consume the energy they require.

NEW

VLT® MICRO DRIVE



Features

- 150% Motor torque up to 1 minute
- Built-in RFI Filter
- Smart Logic Controller
- Built-in Electronic Thermal relay

Small Drive with big performance

- Less installation and operating costs
- Highly reliable due to high quality components
- 98% Energy efficiency with minimum heat losses
- Earth Fault, over temperature and short circuit protection
- RoHs environmental protection compliant



132B0102



132B0100

Micro Drive - Single Phase Input **200-240VAC**, Single phase Output **230VAC**

Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 230V (kW)	Continuous Current (A)	Intermittent Current (A)		
132F0001	0.18	1.2	1.8	M1	70 x 150 x 148
132F0002	0.37	2.2	3.3	M1	70 x 150 x 148
132F0003	0.75	4.2	6.3	M1	70 x 150 x 148
132F0005	1.5	6.8	10.2	M2	75 x 176 x 168
132F0007	2.2	9.6	14.4	M3	90 x 239 x 194

Micro Drive - Three Phase Input **380-480VAC**, Three phase Output **3 x 400VAC**

Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 400V (kW)	Continuous Current (A)	Intermittent Current (A)		
132F0017	0.37	1.2	1.8	M1	70 x 150 x 148
132F0018	0.75	2.2	3.3	M1	70 x 150 x 148
132F0020	1.5	3.7	5.6	M2	75 x 176 x 168
132F0022	2.2	5.3	8.0	M3	90 x 239 x 194
132F0024	3	7.2	10.8	M3	90 x 239 x 194
132F0026	4	9.0	13.7	M3	90 x 239 x 194
132F0028	5.5	12	18	M3	90 x 239 x 194
132F0030	7.5	15.5	23.5	M3	90 x 239 x 194
132F0058	11	23	34.5	M4	125 x 292 x 241
132F0059	15	31	46.5	M4	125 x 292 x 241
132F0060	18.5	37	55.5	M5	165 x 335 x 248
132F0061	22	43	64.5	M5	165 x 335 x 248

Accessories

Code	Description
132B0111	DIN Rail Mounting Kit for M1 frame
132B0100	VLT® Control panel LCP 11 - without potentiometer
132B0101	VLT® Control panel LCP 12 - with potentiometer
132B0102	LCP Remote Mounting Kit with 3m cable for control panel

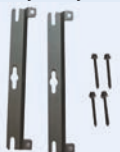
NEW

VLT DECENTRALISED DRIVE



Technical Highlights

- Built-in smart logic controller
- Built-in DC coil to limit harmonic distortion
- Very easy to install and operate



130B5772



130B5778

Decentral Drive **IP66** - Three Phase Input **380-480VAC**, Three phase Output **3 x 400VAC**

Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 400V (kW)	Continuous Current (A)	Intermittent Current (A)		
FCD302-PK37-T4-66	0.37	1.2	1.9	S	200 x 331.5 x 175
FCD302-PK55-T4-66	0.55	1.6	2.6	S	200 x 331.5 x 175
FCD302-PK75-T4-66	0.75	2.2	3.5	S	200 x 331.5 x 175
FCD302-P1K1-T4-66	1.1	2.7	4.3	S	200 x 331.5 x 175
FCD302-P1K5-T4-66	1.5	3.7	5.9	S	200 x 331.5 x 175
FCD302-P2K2-T4-66	2.2	5.0	8.0	S	200 x 331.5 x 175
FCD302-P3K0-T4-66	3.0	6.5	10.4	L	201 x 431.5 x 186

Accessories

Code	Description
130B5771	Mounting brackets extended 40mm brackets
130B5772	Flat Mounting brackets
130B5778	Brake resistor 1750Ω 10W - Internal installations
130B5780	Brake resistor 350Ω 10W - Internal installations

One box concept minimizes design and installation cost

Unlike some decentral drives solutions, VLT® Decentral Drive **FCD 302** is a true 'One box' solutions based on the same reliable platform as the original VLT Automation Drive

Design and installation cost can be dramatically reduced. No need for field distribution or drop-down boxes and no external 24VDC supply is required.

For the OEM it's a breeze - fewer boxes to be mounted in fewer positions and fewer connections and terminations so that labour costs are significantly reduced.

This latest generation VLT® Decentral Drive **FCD 302** has been designed with simplicity and robustness in mind and offers significant advantages for multi-motor installations by mounting the drives close to the motors.

NEW

VLT HVAC DRIVE

Features

- Dedicated HVAC I/O Function for temperature sensors
- Smart Logic Controller which often makes PLC unnecessary
- No external PID controller required
- Real time clock enabling daily & weekly settings
- Automatic Energy Optimisation
- Maintenance free drive
- Extremely reliable & robust
- Enhanced advanced monitoring
- Application: Compressors, pumps, fans, building automation



HVAC Drive - Three Phase Input **380-480VAC**, Three phase Output **3 x 400VAC**

Code - IP21	Code - IP54	Low Overload Ratings			Frame Size	Dimensions (mm) W x H x D
		Motor Power 400V (kW)	Continuous Current (A)	Intermittent Current (A)		
FC102-P11K-T4-B1-21	-	11	24	26.4	B1	242 x 480 x 260
FC102-P15K-T4-B1-21	-	15	32	35.2	B1	242 x 480 x 260
FC102-P18K-T4-B1-21	-	18.5	37.5	41.3	B1	242 x 480 x 260
FC102-P22K-T4-B2-21	-	22	44	48.4	B2	242 x 650 x 260
FC102-P30K-T4-B2-21	-	30	61	67.1	B2	242 x 650 x 260
FC102-P37K-T4-C1-21	-	37	73	80.3	C1	308 x 680 x 310
FC102-P45K-T4-C1-21	-	45	90	99	C1	308 x 680 x 310
FC102-P55K-T4-C1-21	-	55	106	117	C1	308 x 680 x 310
FC102-P75K-T4-C2-21	-	75	147	162	C2	370 x 770 x 335
FC102-P90K-T4-C2-21	-	90	177	195	C2	370 x 770 x 335
FC102-P110K-T4-D1-21	FC102-P110K-T4-D1-54	110	212	233	D1	420 x 1209 x 380
FC102-P132K-T4-D1-21	FC102-P132K-T4-D1-54	132	260	286	D1	420 x 1209 x 380
FC102-P160K-T4-D2-21	FC102-P160K-T4-D2-54	160	315	347	D2	420 x 1589 x 380
FC102-P200K-T4-D2-21	FC102-P200K-T4-D2-54	200	395	435	D2	420 x 1589 x 380
FC102-P250K-T4-D2-21	FC102-P250K-T4-D2-54	250	480	528	D2	420 x 1589 x 380
FC102-P315K-T4-E1-21	FC102-P315K-T4-E1-54	315	588	647	E1	2197 x 840 x 736
FC102-P355K-T4-E1-21	FC102-P355K-T4-E1-54	355	658	724	E1	2197 x 840 x 736
FC102-P400K-T4-E1-21	FC102-P400K-T4-E1-54	400	745	820	E1	2197 x 840 x 736
FC102-P450K-T4-E1-21	FC102-P450K-T4-E1-54	450	800	880	E1	2197 x 840 x 736
FC102-P500K-T4-F1-21	FC102-P500K-T4-F1-54	500	880	968	F1	1569 x 2324 x 927
FC102-P560K-T4-F1-21	FC102-P560K-T4-F1-54	560	990	1089	F1	1569 x 2324 x 927
FC102-P630K-T4-F1-21	FC102-P630K-T4-F1-54	630	1120	1680	F1	1569 x 2324 x 927
FC102-P710K-T4-F1-21	FC102-P710K-T4-F1-54	710	1260	1890	F1	1569 x 2324 x 927
FC102-P800K-T4-F2-21	FC102-P800K-T4-F2-54	800	1460	1606	F2	1962 x 2324 x 927
FC102-P1M0-T4-F2-21	FC102-P1M0-T4-F2-54	1000	1720	1892	F2	1962 x 2324 x 927

HVAC Drive - Three Phase Input **525-690VAC**, Three phase Output **3 x 550VAC**

Code - IP21	Code - IP54	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
		Motor Power 400V (kW)	Continuous Current (A)	Intermittent Current (A)		
FC102-P110K-T7-D1-21	FC102-P110K-T7-D1-54	110	137	151	D1	420 x 1209 x 380
FC102-P132K-T7-D1-21	FC102-P132K-T7-D1-54	132	162	178	D1	420 x 1209 x 380
FC102-P160K-T7-D1-21	FC102-P160K-T7-D1-54	160	201	221	D1	420 x 1209 x 380
FC102-P200K-T7-D2-21	FC102-P200K-T7-D2-54	200	253	278	D2	420 x 1589 x 380
FC102-P250K-T7-D2-21	FC102-P250K-T7-D2-54	250	303	333	D2	420 x 1589 x 380
FC102-P315K-T7-D2-21	FC102-P315K-T7-D2-54	315	360	396	D2	420 x 1589 x 380
FC102-P400K-T7-D2-21	FC102-P400K-T7-D2-54	400	418	460	D2	420 x 1589 x 380
FC102-P450K-T7-E1-21	FC102-P450K-T7-E1-54	450	470	517	E1	2197 x 840 x 736
FC102-P500K-T7-E1-21	FC102-P500K-T7-E1-54	500	523	575	E1	2197 x 840 x 736
FC102-P560K-T7-E1-21	FC102-P560K-T7-E1-54	560	596	656	E1	2197 x 840 x 736
FC102-P630K-T7-E1-21	FC102-P630K-T7-E1-54	630	630	693	E1	2197 x 840 x 736
FC102-P710K-T7-F1-21	FC102-P710K-T7-F1-54	710	763	839	F1	1569 x 2324 x 927
FC102-P800K-T7-F1-21	FC102-P800K-T7-F1-54	800	889	978	F1	1569 x 2324 x 927
FC102-P900K-T7-F1-21	FC102-P900K-T7-F1-54	900	988	1087	F1	1569 x 2324 x 927
FC102-P1M0-T7-F1-21	FC102-P1M0-T7-F1-54	1000	1108	1219	F1	1569 x 2324 x 927
FC102-P1M2-T7-F2-21	FC102-P1M2-T7-F2-54	1200	1317	1449	F2	1962 x 2324 x 927
FC102-P1M4-T7-F2-21	FC102-P1M4-T7-F2-54	1400	1479	1627	F2	1962 x 2324 x 927

MOTOR CONTROL & MOTORS

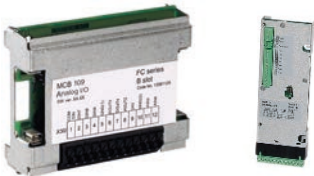
VLT AQUA & HVAC ACCESSORIES



130B1100/130B1102

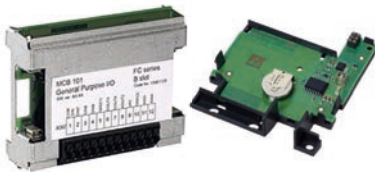


130B1119/130B1196
130B1196



130B1143

130B1164



130B1125
130B1143

134B6544



130B1108

130B1137



130B1124

130B1107



130B1113

Fieldbus Communication

Code	Description	Protocols	Connection type
130B1100	VLT® Profibus	FMS , DP , FMS , FDL	Screw terminal
130B1102	VLT® Devicenet	CIP, CAN	Screw terminal
130B1135	VLT® PROFINET	PROFINET , DCP , LLDP , HTTP , SMTP , TCP/IP	RJ-45
130B1119	VLT® EtherNet/IP	EtherNet/IP , CIP , HTTP , SMPT , DHCP	RJ-45
130B1196	VLT® Modbus TCP	EtherNet/IP , CIP , HTTP , SMPT , DHCP , TCP/IP	RJ-45

Relay and Analogue I/O Option

Code	Description	I/O
130B1110	VLT® Relay Option	3 x 3CO RELAYS 2A @ 240VAC, 1A @ 24VDC
130B1143	VLT® Analog I/O Option	3x Analog inputs: 0 ... 10V / Pt1000 / Ni1000 / 3x Analog outputs: 0 ... 10V

Application Options

Code	Description	I/O
130B1125	VLT® General Purpose I/O	3x Digital inputs Opto-decoupled 0 - 24 V. / 2x Analog inputs 0 - 10 V. / 2x Analog outputs NPN / PNP switchable 24 V / 1x Analog output 0/4 - 20 Ma
130B1172	VLT® Sensor Input Card	2 or 3 wire PT100/PT1000
130B1137	VLT® PTC Thermistor Card	1x PTB-certified PTC thermistor input / 1x Switch-off signal for the Safe Stop function - 60mA @ 24VDC 1x PNP Transistor output - 10mA @ 24VDC
130B1164	VLT® Extended Relay Card MCB 113	4x SPDT Relays = 8A @ 250VAC OR 30VDC 7x Digital Inputs = 0.24VDC PNP/NPN 2x Analog Outputs = 4-20mA
130B1108	VLT® 24V DC Supply MCB 107	24V Input voltage Max Input current 2.2A Max cable Length 75M
134B6544	VLT® Real Time Clock	The drive uses it for synchronizing real-time data.

LCP Control Panel

Code	Description	I/O
130B1124	VLT® Control Panel LCP 101	Numerical Control unit
130B1107	VLT® Control Panel LCP 102	Graphic Control unit

LCP Panel Mounting Kit for IP20 Enclosure

Code	Description	Contains
130B1113	LCP mounting kit with Graphical Control	Kit Includes Fasteners, Gasket, 130B1107, and 3M Cable
130B1114	LCP mounting kit with Numerical Control	Kit Includes Fasteners, Gasket, 130B1124, and 3M Cable
130B1117	LCP mounting kit 1	Kit Includes Fasteners, Gaskets, 3M cable without LCP
130B1170	LCP mounting Kit 2	Kit Includes Fasteners, Gaskets, without LCP & without Cable

LCP Panel Mounting Kit for IP55 Enclosure

Code	Description	Contains
130B1129	LCP mounting Kit 3	Kit includes fasteners, gasket, blind cover, 8M "free end cable" without LCP



VLT AQUA DRIVE

Technical Highlights

- Built-in smart logic controller making PLC unnecessary in many applications
- Reliable IP Rated Enclosures for indoor/outdoor mounting (up to IP66 on request)
- Dry run and over load pump protection
- Auto tuning of PI controllers saving time

Key Benefits

- User friendly award winning control panel (LCP)
- High energy saving efficiency (98%)
- Safe Operation and less wiring
- Broad usability in standard factory supplied enclosures

Key Benefits

- Irrigation
- Water supply
- Wastewater treatment



Aqua Drive - Single Phase Input **200-240VAC**, Single phase Output **230VAC**

Code - IP21	Code - IP55	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
		Motor Power 230V (kW)	Continuous Current (A)	Intermittent Current (A)		
FC202-P1K5-T2-B1-21	FC202-P1K5-T2-B1-55	1.5	15	16.5	B1	242 x 480 x 260
FC202-P2K2-T2-B1-21	FC202-P2K2-T2-B1-55	2.2	20.5	22.6	B1	242 x 480 x 260
FC202-P3K0-T2-B1-21	FC202-P3K0-T2-B1-55	3	24	26.4	B1	242 x 480 x 260
FC202-P3K7-T2-B1-21	FC202-P3K7-T2-B1-55	3.7	32	35.2	B1	242 x 480 x 260
FC202-P5K5-T2-B1-21	FC202-P5K5-T2-B1-55	5.5	46	50.6	B1	242 x 480 x 260
FC202-P7K5-T2-B2-21	FC202-P7K5-T2-B2-55	7.5	59	64.9	B2	242 x 650 x 260
FC202-P15K-T2-C1-21	FC202-P15K-T2-C1-55	15	111	122.1	C1	308 x 680 x 310
FC202-P22K-T2-C2-21	FC202-P22K-T2-C2-55	22	172	189.2	C2	370 x 770 x 335

Aqua Drive - Three Phase Input **380-480VAC**, Three phase Output **3 x 400VAC**

Code - IP21	Code - IP54	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
		Motor Power 400V (kW)	Continuous Current (A)	Intermittent Current (A)		
FC202-P11K-T4-B1-21	-	11	24	24	B1	242 x 480 x 260
FC202-P15K-T4-B1-21	-	15	32	32	B1	242 x 480 x 260
FC202-P18K-T4-B1-21	-	18	37.5	37.5	B1	242 x 480 x 260
FC202-P22K-T4-B2-21	-	22	44	44	B2	242 x 650 x 260
FC202-P30K-T4-B2-21	-	30	61	61	B2	242 x 650 x 260
FC202-P37K-T4-C1-21	-	37	80.3	73	C1	308 x 680 x 310
FC202-P45K-T4-C1-21	-	45	99	90	C1	308 x 680 x 310
FC202-P55K-T4-C1-21	-	55	117	106	C1	308 x 680 x 310
FC202-P75K-T4-C2-21	-	75	162	147	C2	370 x 770 x 335
FC202-P90K-T4-C2-21	-	90	195	177	C2	370 x 770 x 335
FC202-P110K-T4-D1-21	FC202-P110K-T4-D1-54	110	212	233	D1	420 x 1209 x 380
FC202-P132K-T4-D1-21	FC202-P132K-T4-D1-54	132	260	286	D1	420 x 1209 x 380
FC202-P160K-T4-D2-21	FC202-P160K-T4-D2-54	160	315	347	D2	420 x 1589 x 380
FC202-P200K-T4-D2-21	FC202-P200K-T4-D2-54	200	395	435	D2	420 x 1589 x 380
FC202-P250K-T4-D2-21	FC202-P250K-T4-D2-54	250	480	528	D2	420 x 1589 x 380
FC202-P315K-T4-E1-21	FC202-P315K-T4-E1-54	315	588	647	E1	2197 x 840 x 736
FC202-P355K-T4-E1-21	FC202-P355K-T4-E1-54	355	658	724	E1	2197 x 840 x 736
FC202-P400K-T4-E1-21	FC202-P400K-T4-E1-54	400	745	820	E1	2197 x 840 x 736
FC202-P450K-T4-E1-21	FC202-P450K-T4-E1-54	450	800	880	E1	2197 x 840 x 736
FC202-P500K-T4-F1-21	FC202-P500K-T4-F1-54	500	880	968	F1	1569 x 2324 x 927
FC202-P560K-T4-F1-21	FC202-P560K-T4-F1-54	560	990	1089	F1	1569 x 2324 x 927
FC202-P630K-T4-F1-21	FC202-P630K-T4-F1-54	630	1120	1232	F1	1569 x 2324 x 927
FC202-P710K-T4-F1-21	FC202-P710K-T4-F1-54	710	1260	1386	F1	1569 x 2324 x 927
FC202-P800K-T4-F2-21	FC202-P800K-T4-F2-54	800	1460	1606	F2	1962 x 2324 x 927
FC202-P1M0-T4-F2-21	FC202-P1M0-T4-F2-54	1000	1720	1892	F2	1962 x 2324 x 927

MOTOR CONTROL & MOTORS

VLT AQUA DRIVE

The VLT Aqua Drives are dedicated water and wastewater application drives with a wide range of powerful standard and optional features.

Features

- Cascade control
- Dry run detection
- Overload protection
- Minimum speed monitor
- Real time clock
- Alerts & warning programming

Proven Solution

VLT Aqua Drives are built on a flexible, modular design concept to provide a versatile motor control solution. It has an energy efficient design, intelligent heat management, automatic adaptation to application, energy efficient harmonic mitigation and optimal control of all motors.



Aqua Drive - Three Phase Input **525-600VAC**, Three phase Output **3 x 550VAC**

Code - IP21	Code - IP55	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
		Motor Power 550V (kW)	Continuous Current (A)	Intermittent Current (A)		
FC202-PK75-T6-A3-21	FC202-PK75-T6-A3-55	0.75	1.7	-	A3	130 x 268 x 205
FC202-P1K1-T6-A3-21	FC202-P1K1-T6-A3-55	1.1	2.4	2.6	A3	130 x 268 x 205
FC202-P1K5-T6-A3-21	FC202-P1K5-T6-A3-55	1.5	2.7	3	A3	130 x 268 x 205
FC202-P2K2-T6-A3-21	FC202-P2K2-T6-A3-55	2.2	3.9	4.3	A3	130 x 268 x 205
FC202-P3K0-T6-A3-21	FC202-P3K0-T6-A3-55	3	4.9	5.4	A3	130 x 268 x 205
FC202-P4K0-T6-A3-21	FC202-P4K0-T6-A3-55	4	6.1	6.7	A3	130 x 268 x 205
FC202-P5K5-T6-A3-21	FC202-P5K5-T6-A3-55	5.5	9	9.9	A3	130 x 268 x 205
FC202-P7K5-T6-A3-21	FC202-P7K5-T6-A3-55	7.5	11	12.1	A3	130 x 268 x 205

Aqua Drive - Three Phase Input **525-690VAC**, Three phase Output **3 x 550VAC**

Code - IP21	Code - IP54/55	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
		Motor Power 550V (kW)	Continuous Current (A)	Intermittent Current (A)		
FC202-P11K-T7-B2-21	FC202-P11K-T7-B2-55	11	14	15.4	B2	242 x 650 x 260
FC202-P15K-T7-B2-21	FC202-P15K-T7-B2-55	15	19	20.9	B2	242 x 650 x 260
FC202-P18K-T7-B2-21	FC202-P18K-T7-B2-55	18	23	25.3	B2	242 x 650 x 260
FC202-P22K-T7-B2-21	FC202-P22K-T7-B2-55	22	28	30.8	B2	242 x 650 x 260
FC202-P30K-T7-B2-21	FC202-P30K-T7-B2-55	30	36	39.6	B2	242 x 650 x 260
FC202-P37K-T7-C2-21	FC202-P37K-T7-C2-55	37	43	47.3	C2	370 x 770 x 335
FC202-P45K-T7-C2-21	FC202-P45K-T7-C2-55	45	54	59.4	C2	370 x 770 x 335
FC202-P55K-T7-C2-21	FC202-P55K-T7-C2-55	55	65	71.5	C2	370 x 770 x 335
FC202-P75K-T7-C2-21	FC202-P75K-T7-C2-55	75	87	95.7	C2	370 x 770 x 335
FC202-P90K-T7-C2-21	FC202-P90K-T7-C2-55	90	105	115.5	C2	370 x 770 x 335
FC202-P110K-T7-D1-21	FC202-P110K-T7-D1-54	110	137	151	D1	420 x 1209 x 380
FC202-P132K-T7-D1-21	FC202-P132K-T7-D1-54	132	162	178	D1	420 x 1209 x 380
FC202-P160K-T7-D1-21	FC202-P160K-T7-D1-54	160	201	221	D1	420 x 1209 x 380
FC202-P200K-T7-D2-21	FC202-P200K-T7-D2-54	200	253	278	D2	420 x 1589 x 380
FC202-P250K-T7-D2-21	FC202-P250K-T7-D2-54	250	303	333	D2	420 x 1589 x 380
FC202-P315K-T7-D2-21	FC202-P315K-T7-D2-54	315	360	396	D2	420 x 1589 x 380
FC202-P400K-T7-D2-21	FC202-P400K-T7-D2-54	400	418	460	D2	420 x 1589 x 380
FC202-P450K-T7-E1-21	FC202-P450K-T7-E1-54	450	470	517	E1	2197 x 840 x 736
FC202-P500K-T7-E1-21	FC202-P500K-T7-E1-54	500	523	575	E1	2197 x 840 x 736
FC202-P560K-T7-E1-21	FC202-P560K-T7-E1-54	560	596	656	E1	2197 x 840 x 736
FC202-P630K-T7-E1-21	FC202-P630K-T7-E1-54	630	630	693	E1	2197 x 840 x 736
FC202-P710K-T7-F1-21	FC202-P710K-T7-F1-54	710	763	839	F1	1569 x 2324 x 927
FC202-P800K-T7-F1-21	FC202-P800K-T7-F1-54	800	889	978	F1	1569 x 2324 x 927
FC202-P900K-T7-F1-21	FC202-P900K-T7-F1-54	900	988	1087	F1	1569 x 2324 x 927
FC202-P1M0-T7-F2-21	FC202-P1M0-T7-F2-54	1000	1108	1219	F2	1962 x 2324 x 927
FC202-P1M2-T7-F2-21	FC202-P1M2-T7-F2-54	1200	1317	1449	F2	1962 x 2324 x 927
FC202-P1M4-T7-F2-21	FC202-P1M4-T7-F2-54	1400	1479	1627	F2	1962 x 2324 x 927

VACON® 20 COMPACT DRIVES



MI1 Frame



MI2 Frame



MI3 Frame



MI4 Frame



MI5 Frame

Features

- Push Button HMI
- EMC 4 (also suitable for IT networks)
- English quick guide
- 50Hz parameter settings

Typical applications

- Pumps and fans
- Conveyors
- Packaging, processing and washing machines

Technical highlights

- Wide power range up to 18.5 kW
- High performance and functionality
- Full I/O + option board support
- Fast installation and setup
- Built-in choke as option in ≥16A types
- Induction and permanent magnet (PM) motor support

Key benefits

- Fieldbus connectivity
- Parameter copying without main power
- Custom-made software possible

VACON 20 - Single Phase Input **208-240V**, Three Phase Output **3 x 230V IP20**

Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 230V (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
VACON0020-1L-0001-2	0,25	1,7	2,6	MI1	66 x 160 x 98
VACON0020-1L-0002-2	0,37	2,4	3,6	MI1	66 x 160 x 98
VACON0020-1L-0003-2	0,55	2,8	4,2	MI1	66 x 160 x 98
VACON0020-1L-0004-2	0,75	3,7	5,6	MI2	90 x 195 x 102
VACON0020-1L-0005-2	1,1	4,8	7,2	MI2	90 x 195 x 102
VACON0020-1L-0007-2	1,5	7	10,5	MI2	90 x 195 x 102
VACON0020-1L-0009-2	2,2	9,6	14,4	MI3	100 x 255 x 109

VACON 20 - Three Phase Input **380-480V**, Three Phase Output **3 x 400V IP20/IP21**

Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 400V (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
IP20/Open Type					
VACON0020-3L-0001-4	0,37	1,3	2	MI1	66 x 160 x 98
VACON0020-3L-0002-4	0,55	1,9	2,9	MI1	66 x 160 x 98
VACON0020-3L-0003-4	0,75	2,4	3,6	MI1	66 x 160 x 98
VACON0020-3L-0004-4	1,1	3,3	5	MI2	90 x 195 x 102
VACON0020-3L-0005-4	1,5	4,3	6,5	MI2	90 x 195 x 102
VACON0020-3L-0006-4	2,2	5,6	8,4	MI2	90 x 195 x 102
VACON0020-3L-0008-4	3	7,6	11,4	MI3	100 x 255 x 109
VACON0020-3L-0009-4	4	9	13,5	MI3	100 x 255 x 109
VACON0020-3L-0012-4	5,5	12	18	MI3	100 x 255 x 109

IP21/Open Type

VACON0020-3L-0016-4	7,5	16	24	MI4	165 x 370 x 165
VACON0020-3L-0023-4	11	23	34,5	MI4	165 x 370 x 165
VACON0020-3L-0031-4	15	31	46,5	MI5	165 x 414 x 202
VACON0020-3L-0038-4	18,5	38	57	MI5	165 x 414 x 202

VACON 20 - Three Phase Input **525-575V**, Three Phase Output **3 x 525V IP20**

Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 575V (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
VACON0020-3L-0002-7	0,75	1,7	2,6	MI3	100 x 255 x 109
VACON0020-3L-0003-7	1,5	2,7	4,1	MI3	100 x 255 x 109
VACON0020-3L-0004-7	2,2	3,9	5,9	MI3	100 x 255 x 109
VACON0020-3L-0006-7	4	6,1	9,2	MI3	100 x 255 x 109
VACON0020-3L-0009-7	5,5	9	13,5	MI3	100 x 255 x 109

VACON® COMPACT OPTIONS

Keypad Door Mounting

Code	Description	Suitability
PAN-HMDR-TMX-MC03-2M	VACON 20 door mounting kit with text keypad & passive adapter with 2m RJ45 cable	VACON 20
PAN-HMDR-TMX-MC03-3M	VACON 20 door mounting kit with text keypad & passive adapter with 3m RJ45 cable	VACON 20
PAN-HMDR-TMX-MC03-6M	VACON 20 door mounting kit with text keypad & passive adapter with 6m RJ45 cable	VACON 20
VACON-PAN-HMDR-MC03-2M	Complete IP54 keypad door kit+3m cable+adapater	VACON 20/20CP
VACON-PAN-HMTX-MC06-X	Handheld/Magnetic fixing IP66 text keypad w/ cable, l=0,5m	VACON 20X
VACON-PAN-HMTX-MC06-CP	Handheld/Magnetic fixing IP66 text keypad w/ cable, l=0,5m	VACON 20CP
PAN-HMWM-MK02	Keypad Wall mounting Kit	VACON 20/20X/20CP



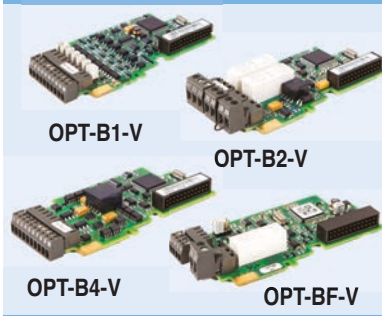
ENC-SLOT VACON-ADP-MCAA

Option Board Mounting

Code	Description	Suitability
ENC-SLOT-MC03-13	Option board mounting kit, drive width +28 mm	VACON 20 MI1-3
ENC-SLOT-MC03-45	Option board mounting kit	VACON 20 MI4-5

Communication Adapters

Code	Description	Suitability
CAB-USB/RS485	USB to RS-485 cable for PC	VACON 20/20X/20CP
VACON-ADP-MCAA	MCA adapter for PC tool and parameter cloning	VACON 20
VACON-ADP-MCAA-KIT	Kit with PC cable and MCA adapter	VACON 20



OPT-B1-V

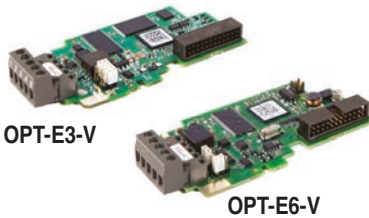
OPT-B2-V

OPT-B4-V

OPT-BF-V

I/O boards D- and E-slot Compatible

Code	Description	Suitability
OPT-B1-V	6 x DI / DO, programmable	VACON 20/20X/20CP
OPT-B2-V	2 x RO + Thermistor	VACON 20/20X/20CP
OPT-B4-V	1 x AI, 2 x AO (isolated)	VACON 20/20X/20CP
OPT-B5-V	3 x RO	VACON 20/20X/20CP
OPT-B9-V	1 x RO, 5 x DI (42-240VAC)	VACON 20/20X/20CP
OPT-BF-V	1 x AO, 1 x DO, 1 x RO	VACON 20/20X/20CP
OPT-BH-V	3 x Temp sensor inputs (PT100, PT1000, KTY84-130, KTY84-150, KTY84-131, NI1000)	VACON 20/20X/20CP



OPT-E3-V

OPT-E6-V

* With ENC-SLOT-MC03-13/45

Field Bus Boards

Code	Description	Suitability
OPT-E3-V	Profibus DP, Screw Terminals	VACON 20*/20X/20CP
OPT-E5-V	Profibus DP, Sub-D9 Connector	VACON 20*/20X/20CP
OPT-E6-V	CANopen	VACON 20*/20X/20CP
OPT-E7-V	DeviceNet	VACON 20*/20X/20CP
OPT-E9-V	2-Port Ethernet (Modbus TCP/UDP, PROFINET, EtherNet/IP, RSTP, MRP)	VACON 20*/20X/20CP
OPT-EC-V	EtherCAT field bus	VACON 20*/20X/20CP
OPT-CJ-V	BACnet MS/TP	VACON 20*/20X/20CP

VACON 20 External Brake Resistors



BRR-0025-HD-2

BRR-0022-LD-5

BRR-0013-HD-6

Code	Dimensions W x H x D mm	Power [kW] @ 100% ED based on a 120s cycle	Resistance (Ω)	Suitability
208-240V				
BRR-0025-LD-2	60 x 31 x 165	0,1	30	VACON20 MI4 3~230V
BRR-0031-LD-2	60 x 31 x 246	0,16	20	VACON20 MI5 3~230V
BRR-0025-HD-2	60 x 106 x 381	0,27	30	VACON20 MI4 3~230V
BRR-0031-HD-2	124 x 122 x 400	0,41	20	VACON20 MI5 3~230V
380-500V				
BRR-0022-LD-5	60 x 31 x 335	0,24	63	VACON20 MI3 3~400V
BRR-0031-LD-5	117 x 124 x 225	0,35	42	VACON20 MI4 3~400V
BRR-0045-LD-5	117 x 124 x 426	0,71	21	VACON20 MI5 3~400V
BRR-0022-HD-5	124 x 126 x 540	0,61	63	VACON20 MI3 3~400V
BRR-0031-HD-5	124 x 126 x 700	0,91	42	VACON20 MI4 3~400V
BRR-0045-HD-5	260 x 101 x 700	1,8	21	VACON20 MI5 3~400V
525-690V				
BRR-0013-LD-6	60 x 31 x 405	0,28	100	VACON 20 MI3 3~600V
BRR-0013-HD-6	124 x 126 x 600	0,73	100	VACON 20 MI3 3~600V

HD = Heavy Duty (3 sec Full Power + 7 sec Ramp to Zero)

LD = Light Duty (5 sec Ramp to Zero)

VACON® 100 FLOW

Application Specific Features

- Integrated DC chokes
- Pumps:
 - 2 PID controllers with sleep mode, soft fill, jockey pump, pump autoclean
 - PM and induction motor support

Fans:

- Flying start, motor switch
- 3 prohibit frequency ranges

Benefits

- Demand-based optimization of the process for accurate process control and energy saving

Common Features

- Built-in Modbus TCP/IP and Modbus RTU
- Ethernet always included
- **Extended lifespan: last up to 300,000 hours**
- Film capacitors
- Conformal coating on PCB's
- Standard I/O + 3 free slots



VACON 100 FLOW - Three Phase Input **380-500V**, Three Phase Output **3 x 400V**

IP21/Type 1, Air-cooled, Wall-mounted drive, EMC Class C2, Graphical keypad

Code	Low Overload Ratings				Frame Size	Dimensions (mm) W x H x D
	Motor Power 400V (kW)	Motor Power 480V (Hp)	Continuous Current I _L (A)	110% Overload Current (A)		
VACON0100-3L-0003-5-FLOW	1,1	1,5	3,4	3,7	MR4	128 x 328 x 190
VACON0100-3L-0004-5-FLOW	1,5	2	4,8	5,3	MR4	128 x 328 x 190
VACON0100-3L-0005-5-FLOW	2,2	3	5,6	6,2	MR4	128 x 328 x 190
VACON0100-3L-0008-5-FLOW	3	4	8	8,8	MR4	128 x 328 x 190
VACON0100-3L-0009-5-FLOW	4	5	9,6	10,6	MR4	128 x 328 x 190
VACON0100-3L-0012-5-FLOW	5,5	7,5	12	13,2	MR4	128 x 328 x 190
VACON0100-3L-0016-5-FLOW	7,5	10	16	17,6	MR5	144 x 419 x 214
VACON0100-3L-0023-5-FLOW	11	15	23	25,3	MR5	144 x 419 x 214
VACON0100-3L-0031-5-FLOW	15	20	31	34,1	MR5	144 x 419 x 214
VACON0100-3L-0038-5-FLOW	18,5	25	38	41,8	MR6	195 x 557 x 229
VACON0100-3L-0046-5-FLOW	22	30	46	50,6	MR6	195 x 557 x 229
VACON0100-3L-0061-5-FLOW	30	40	61	67,1	MR6	195 x 557 x 229
VACON0100-3L-0072-5-FLOW	37	50	72	79,2	MR7	237 x 660 x 259
VACON0100-3L-0087-5-FLOW	45	60	87	95,7	MR7	237 x 660 x 259
VACON0100-3L-0105-5-FLOW	55	75	105	115,5	MR7	237 x 660 x 259
VACON0100-3L-0140-5-FLOW	75	100	140	154	MR8	290 x 966 x 343
VACON0100-3L-0170-5-FLOW	90	125	170	187	MR8	290 x 966 x 343
VACON0100-3L-0205-5-FLOW	110	150	205	225,5	MR8	290 x 966 x 343
VACON0100-3L-0261-5-FLOW	132	200	261	287,1	MR9	480 x 1150 x 365
VACON0100-3L-0310-5-FLOW	160	250	310	341	MR9	480 x 1150 x 365

VACON 100 FLOW - Three Phase Input **525-600V**, Three Phase Output **3 x 525V**

IP21/Type 1, Air-cooled, Wall-mounted drive, EMC Class C2, Graphical keypad

Code	Low Overload Ratings				Frame Size	Dimensions (mm) W x H x D
	Motor Power 525V (kW)	Motor Power 480V (Hp)	Continuous Current I _L (A)	110% Overload Current (A)		
VACON0100-3L-0004-6-FLOW	2,2	3	3,9	4,3	MR5	144 x 419 x 214
VACON0100-3L-0006-6-FLOW	4	5	6,1	6,7	MR5	144 x 419 x 214
VACON0100-3L-0009-6-FLOW	5,5	7,5	9	9,9	MR5	144 x 419 x 214
VACON0100-3L-0011-6-FLOW	7,5	10	11	12,1	MR5	144 x 419 x 214
VACON0100-3L-0018-6-FLOW	11	15	18	19,8	MR6	195 x 557 x 229
VACON0100-3L-0022-6-FLOW	15	20	22	24,2	MR6	195 x 557 x 229
VACON0100-3L-0027-6-FLOW	18,5	25	27	29,7	MR6	195 x 557 x 229
VACON0100-3L-0034-6-FLOW	22	30	34	37,4	MR6	195 x 557 x 229
VACON0100-3L-0041-6-FLOW	30	40	41	45,1	MR7	237 x 660 x 259
VACON0100-3L-0052-6-FLOW	37	50	52	57,2	MR7	237 x 660 x 259
VACON0100-3L-0062-6-FLOW	45	60	62	68,2	MR7	237 x 660 x 259
VACON0100-3L-0080-6-FLOW	55	75	80	88	MR8	290 x 966 x 343
VACON0100-3L-0100-6-FLOW	75	100	100	110	MR8	290 x 966 x 343
VACON0100-3L-0125-6-FLOW	90	125	125	137,5	MR8	290 x 966 x 343
VACON0100-3L-0144-6-FLOW	110	150	144	158,4	MR9	482 x 1150 x 365
VACON0100-3L-0208-6-FLOW	160	200	208	228,8	MR9	482 x 1150 x 365

VACON® 100 INDUSTRIAL

Application Specific Features

- Wide power range using only four frames
- Integrated DC chokes
- Options module for easy integration (frames MR10 and MR12)
- Safe Torque Off, Safe Stop1, ATEX-certified thermistor input
- Integrated brake chopper (optional, see page 154)
- Integrated output filters (optional)

Benefits

- Reduced installation space and costs
- Easier integration

Common Features

- Standard I/O + 3 free slots
- Built-in PLC capability
- High efficiency > 97% + energy optimization
- Built-in Modbus TCP/IP and Modbus RTU
- Ethernet always included
- **Extended lifespan: last up to 300,000 hours**



VACON 100 INDUSTRIAL - Three Phase Input **380-500V**, Three Phase Output **3 x 400V**

IP21/Type 1, Air-cooled, Wall-mounted drive, EMC Class C2, Graphical keypad

Code	Low Overload Ratings			High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 400V (kW)	Continuous Current I _L (A)	110% Overload Current (A)	Motor Power 400V (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
VACON0100-3L-0003-5	1,1	3,4	3,7	0,75	2,6	3,9	MR4	128 x 328 x 190
VACON0100-3L-0004-5	1,5	4,8	5,3	1,1	3,4	5,1	MR4	128 x 328 x 190
VACON0100-3L-0005-5	2,2	5,6	6,2	1,5	4,3	6,5	MR4	128 x 328 x 190
VACON0100-3L-0008-5	3	8	8,8	2,2	5,6	8,4	MR4	128 x 328 x 190
VACON0100-3L-0009-5	4	9,6	10,6	3	8	12	MR4	128 x 328 x 190
VACON0100-3L-0012-5	5,5	12	13,2	4	9,6	14,4	MR4	128 x 328 x 190
VACON0100-3L-0016-5	7,5	16	17,6	5,5	12	18	MR5	144 x 419 x 214
VACON0100-3L-0023-5	11	23	25,3	7,5	16	24	MR5	144 x 419 x 214
VACON0100-3L-0031-5	15	31	34,1	11	23	34,5	MR5	144 x 419 x 214
VACON0100-3L-0038-5	18,5	38	41,8	15	31	46,5	MR6	195 x 557 x 229
VACON0100-3L-0046-5	22	46	50,6	18,5	38	57	MR6	195 x 557 x 229
VACON0100-3L-0061-5	30	61	67,1	22	46	69	MR6	195 x 557 x 229
VACON0100-3L-0072-5	37	72	79,2	30	61	91,5	MR7	237 x 660 x 259
VACON0100-3L-0087-5	45	87	95,7	37	72	108	MR7	237 x 660 x 259
VACON0100-3L-0105-5	55	105	115,5	45	87	130,5	MR7	237 x 660 x 259
VACON0100-3L-0140-5	75	140	154	55	105	157,5	MR8	290 x 966 x 343
VACON0100-3L-0170-5	90	170	187	75	140	210	MR8	290 x 966 x 343
VACON0100-3L-0205-5	110	205	225,5	90	170	255	MR8	290 x 966 x 343
VACON0100-3L-0261-5	132	261	287,1	110	205	307,5	MR9	480 x 1150 x 365
VACON0100-3L-0310-5	160	310	341	132	251	376,5	MR9	480 x 1150 x 365

VACON 100 INDUSTRIAL - Three Phase Input **525-600V**, Three Phase Output **3 x 525V**

IP21/Type 1, Air-cooled, Wall-mounted drive, EMC Class C2, Graphical keypad

Code	Low Overload Ratings		High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Continuous Current I _L (A)	110% Overload Current (A)	Motor Power 525V (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
VACON0100-3L-0004-6	3,9	4,3	1,5	2,7	4,1	MR5	144 x 419 x 214
VACON0100-3L-0006-6	6,1	6,7	2,2	3,9	5,9	MR5	144 x 419 x 214
VACON0100-3L-0009-6	9	9,9	4	6,1	9,2	MR5	144 x 419 x 214
VACON0100-3L-0011-6	11	12,1	5,5	9	13,5	MR5	144 x 419 x 214
VACON0100-3L-0018-6	18	19,8	7,5	13,5	20,3	MR6	195 x 557 x 229
VACON0100-3L-0022-6	22	24,2	11	18	27	MR6	195 x 557 x 229
VACON0100-3L-0027-6	27	29,7	15	22	33	MR6	195 x 557 x 229
VACON0100-3L-0034-6	34	37,4	18,5	27	40,5	MR6	195 x 557 x 229
VACON0100-3L-0041-6	41	45,1	22	34	51	MR7	237 x 660 x 259
VACON0100-3L-0052-6	52	57,2	30	41	61,5	MR7	237 x 660 x 259
VACON0100-3L-0062-6	62	68,2	37	52	78	MR7	237 x 660 x 259
VACON0100-3L-0080-6	80	88	45	62	93	MR8	290 x 966 x 343
VACON0100-3L-0100-6	100	110	55	80	120	MR8	290 x 966 x 343
VACON0100-3L-0125-6	125	137,5	75	100	150	MR8	290 x 966 x 343
VACON0100-3L-0144-6	144	158,4	90	125	187,5	MR9	482 x 1150 x 365
VACON0100-3L-0208-6	208	228,8	132	170	255	MR9	482 x 1150 x 365

VACON 100® LOOSE OPTIONS

Code	Description	Suitability
Keypads		
VACON-PAN-HMDR-MK01-2M	VACON 100 door mounting kit with 2m cable	VACON 100 INDUSTRIAL / FLOW
VACON-PAN-HMDR-MK01-3M	VACON 100 door mounting kit with 3m cable	VACON 100 INDUSTRIAL / FLOW
VACON-PAN-HMDR-MK01-6M	VACON 100 door mounting kit with 6m cable	VACON 100 INDUSTRIAL / FLOW
VACON-PAN-HMGR-MK01	VACON 100 Keypad	VACON 100 INDUSTRIAL / FLOW
VACON-PAN-HMGR-MC05-X	Handheld/Magnetic fixing IP66 graphical keypad w/ cable, l=0,5m	VACON 100 X
CAB-HMI2M-MC05-X	MC05 IP66 HMI cable l=2m for -X keypads Option	VACON 100 X
CAB-HMI5M-MC05-X	MC05 IP66 HMI cable l=5m for -X keypads Option	VACON 100 X
PAN-HMWM-MK02	Keypad Wall-mounting Kit	VACON 100 X

I/O boards B -slot compatible

OPT-F3-V	3 x RO	VACON 100 INDUSTRIAL / FLOW
OPT-F4-V	2 x RO + Thermistor	VACON 100 INDUSTRIAL / FLOW

I/O boards D- and E -slot compatible VACON 100 and VACON 100 FLOW also C-slot

OPT-B1-V	6 x DI / DO, programmable	VACON 100 INDUSTRIAL / FLOW / X
OPT-B2-V	2 x RO + Thermistor	VACON 100 INDUSTRIAL / FLOW / X
OPT-B4-V	1 x AI, 2 x AO (isolated)	VACON 100 INDUSTRIAL / FLOW / X
OPT-B5-V	3 x RO	VACON 100 INDUSTRIAL / FLOW / X
OPT-B9-V	1 x RO, 5 x DI (42-240VAC)	VACON 100 INDUSTRIAL / FLOW / X
OPT-BF-V	1 x AO, 1 x DO, 1 x RO	VACON 100 INDUSTRIAL / FLOW / X
OPT-BH-V	3 x Temp sensor inputs (PT100, PT1000, KTY84-130, KTY84-150, KTY84-131, NI1000)	VACON 100 INDUSTRIAL / FLOW / X

Fieldbus boards D- and E -slot compatible

OPT-C4-V	LonWorks	VACON 100 INDUSTRIAL / FLOW / X
OPT-E3-V	Profibus DPV1	VACON 100 INDUSTRIAL / FLOW / X
OPT-E5-V	Profibus DPV1 (D9)	VACON 100 INDUSTRIAL / FLOW / X
OPT-E6-V	CANopen	VACON 100 INDUSTRIAL / FLOW / X
OPT-E7-V	DeviceNet	VACON 100 INDUSTRIAL / FLOW / X
OPT-E9-V	2-Port Ethernet (Modbus TCP/UDP, PROFINET, EtherNet/IP, RSTP, MRP)	VACON 100 INDUSTRIAL / FLOW / X

Safe Torque Off / ATEX (only E -slot)

OPT-BJ-V	Safe Torque Off/ATEX (slot E)	VACON 100 INDUSTRIAL / FLOW
----------	-------------------------------	-----------------------------

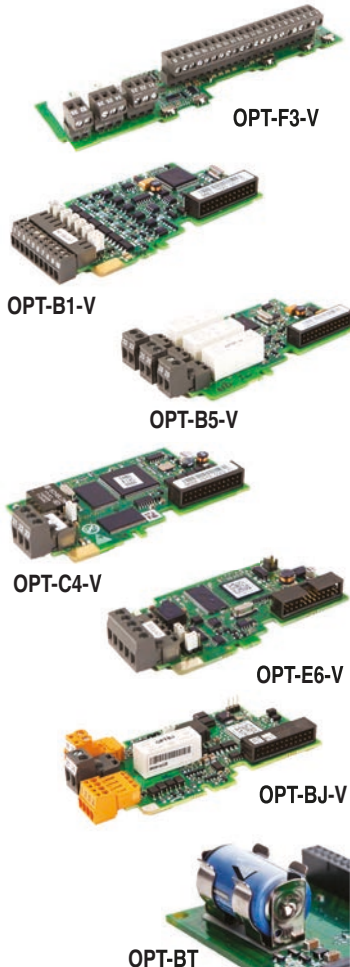
Others

CAB-USB/RS485	PC cable for SW tools, USB to RS-485, cable: 3m	VACON 100 INDUSTRIAL / FLOW / X
OPT-BT-MC04-1	Battery package for real time clock	VACON 100 INDUSTRIAL / FLOW
OPT-BT-MC02-1	Battery package for real time clock	VACON 100 X

Brake Resistors

Code	Dimensions W x H x D mm	Power [kW] at 100% ED based on a 120s cycle	Resistance [Ω]	Weight kg	Suitability
380-500V					
BRR-0022-LD-5	60 x 31 x 335	0.24	63	1.2	VACON 100 INDUSTRIAL MR4
BRR-0031-LD-5	117 x 124 x 225	0.35	42	1.8	VACON 100 INDUSTRIAL MR5
BRR-0045-LD-5	117 x 124 x 426	0.71	21	3.3	VACON 100 INDUSTRIAL MR6
BRR-0061-LD-5	117 x 124 x 526	1.1	21	4	VACON 100 INDUSTRIAL MR7
BRR-0105-LD-5	260 x 101 x 860	2.3	6.5	12.8	VACON 100 INDUSTRIAL MR8
BRR-0300-LD-5	260 x 263 x 960	4.6	3.25	29	VACON 100 INDUSTRIAL MR9
600V					
BRR-0022-HD-5	124 x 126 x 540	0.61	63	3.5	VACON 100 INDUSTRIAL MR4
BRR-0031-HD-5	124 x 126 x 700	0.91	42	4.6	VACON 100 INDUSTRIAL MR5
BRR-0045-HD-5	260 x 101 x 700	1.8	21	11.3	VACON 100 INDUSTRIAL MR6
BRR-0061-HD-5	260 x 101 x 860	2.7	14	12.8	VACON 100 INDUSTRIAL MR7
BRR-0105-HD-5	480 x 300 x 530	5.9	6.5	25	VACON 100 INDUSTRIAL MR8
BRR-0300-HD-5	480 x 300 x 740	11.8	3.25	79	VACON 100 INDUSTRIAL MR9

HD = Heavy Duty (3 sec Full Power + 7 sec Ramp to Zero)
LD = Light Duty (5 sec Ramp to Zero)



MOTOR CONTROL & MOTORS



VACON® 20 X - DECENTRALIZED DRIVE IP66



Technical highlights

- 2g resistance to vibrations (according to 3M6/IEC 60721-3-3)
- Large cooling ribs
- Option of integrated mains switch

Benefits

- Cost savings from decentral concept
- Can be used in almost any environment
- Can be cleaned with pressurized water
- Custom-made software solutions with built-in PLC functionality for OEMs

VACON 20 X - Single Phase Input **208-240V**, Three Phase Output **3 x 240V IP66/Type 4X**

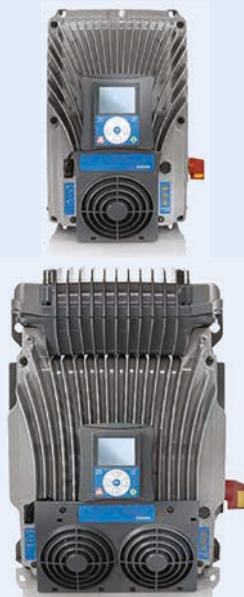
Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
VACON0020-1L-0004-2-X	0,75	3,7	5,6	MU2	169 x 295 x 154
VACON0020-1L-0005-2-X	1,1	4,8	7,2	MU2	170 x 295 x 154
VACON0020-1L-0007-2-X	1,5	7	10,5	MU2	171 x 295 x 154

VACON 20 X - Three Phase Input **380-480V**, Three Phase Output **3 x 400V IP66/Type 4X**, (DC input up to 800VDC-MU3 Frame only)

Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
VACON0020-3L-0003-4-X	0,75	2,4	3,6	MU2	169 x 295 x 154
VACON0020-3L-0004-4-X	1,1	3,3	5	MU2	170 x 295 x 154
VACON0020-3L-0005-4-X	1,5	4,3	6,5	MU2	171 x 295 x 154
VACON0020-3L-0006-4-X	2,2	5,6	8,4	MU2	172 x 295 x 154
VACON0020-3L-0008-4-X	3	7,6	11,4	MU2	173 x 295 x 154
VACON0020-3L-0009-4-X	4	9	13,5	MU3	205 x 375 x 180
VACON0020-3L-0012-4-X	5,5	12	18	MU3	206 x 375 x 180
VACON0020-3L-0016-4-X	7,5	16	24	MU3	207 x 375 x 180

See Page 8 for accessories. Keypads to be ordered separately.

VACON® 100 X - DECENTRALIZED/SOLAR DRIVE IP66



VACON 100 X - Three Phase Input **380-480V**, Three Phase Output **3 x 400V IP66/Type 4X**, DC input up to 800VDC

Code	High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 400V (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
VACON0100-3L-0016-4-X	7,5	16	24	MM5	233 x 367 x 214
VACON0100-3L-0023-4-X	11	23	34	MM5	233 x 367 x 214
VACON0100-3L-0031-4-X	15	31	46	MM5	233 x 367 x 214
VACON0100-3L-0038-4-X	18,5	38	57	MM6	350 x 500 x 235
VACON0100-3L-0046-4-X	22	46	69	MM6	350 x 500 x 235
VACON0100-3L-0061-4-X	30	61	91	MM6	350 x 500 x 235
VACON0100-3L-0072-4-X	37	72	80*	MM6	350 x 500 x 235

See Page 11 for accessories. Keypads to be ordered separately.

* 110% Overload

Technical highlights

- 3g resistance to vibrations (according to 3M7/IEC 60721-3-3)
- Option of integrated mains switch
- Integrated with RS485 Modbus and EtherNET communication
- Integrated Brake Chopper

Benefits

- Able to withstand rough conditions such as heat, dirt and vibrations
- Programming enables top class integration for countless OEM applications
- Mountable in any position

VACON® 100 INDUSTRIAL - STANDALONE

The VACON 100® enclosed drives are designed to meet the most demanding requirements for flexibility, robustness, compactness and service-friendliness. They are a smart choice for many applications and available from 75 to 630 kW at 380-500 V and 75 to 800 kW at 525-690 V.

Features

- Separate cooling air channel
- Common mode and dU/dt filters integrated in cooling air channel
- Back channel cooling option available
- Fast acting aR input fuses as standard
- Integrated output filters and fuse switch as options
- Configured to order with pre-engineered options
- Door-mounted control compartment separate from the main drive
- I/O wired to standard terminal blocks
- Dedicated area for signal lights and control switches
- All components accessible from the front of the enclosure

Proven Solution

Our VACON 100® enclosed drives are compact and tested to meet harsh operating conditions. They can be installed in many different standard applications such as pumps or conveyors. The innovative air-cooling channel ensures reliable thermal handling of the enclosure and provides extended lifetime of the drive with trouble-free operation in tough environments. Approved EMC solutions ensure reliable operation of the drive without disturbing other electrical equipment.



For any enquiries regarding drives and softstarters, contact our specialized team: drives@acdc.co.za

VACON® NXP

Ideal for demanding applications. VACON® NXP range offers the ultimate in motor control, for both induction and permanent magnet (PM) motors, gearless drive applications and paralleling solutions for high power motors. VACON® NXP is the smart drive of choice. With fast fieldbus options and exceptional programming flexibility, your VACON® NXP is easily integrated into any plant's automation system. Satisfied customers also rely on our enclosed cabinet drive solution, VACON® NXC, to perform in the most challenging industrial environments such as oil and gas, extrusion, mining, pulp and paper, water and wastewater applications.



VACON NXP - Three Phase Input **380-500V**, Three Phase Output **3 x 400V IP21/Type 1**, Air-cooled, Wall-mounted, EMC Class H

Code	Low Overload Ratings			High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 400V (kW)	Continuous Current I _L (A)	110% Overload Current (A)	Motor Power 400V (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
NXP00035A2H1SSSA1A200000	1,1	3,3	3,6	0,75	2,2	3,3	FR4	128 x 292 x 190
NXP00045A2H1SSSA1A200000	1,5	4,3	4,7	1,1	3,3	5	FR4	128 x 292 x 190
NXP00055A2H1SSSA1A200000	2,2	5,6	6,2	1,5	4,3	6,5	FR4	128 x 292 x 190
NXP00075A2H1SSSA1A200000	3	7,6	8,4	2,2	5,6	8,4	FR4	128 x 292 x 190
NXP00095A2H1SSSA1A200000	4	9	9,9	3	7,6	11,4	FR4	128 x 292 x 190
NXP00125A2H1SSSA1A200000	5,5	12	13,2	4	9	13,5	FR4	128 x 292 x 190
NXP00165A2H1SSSA1A200000	7,5	16	17,6	5,5	12	18	FR5	144 x 391 x 214
NXP00225A2H1SSSA1A200000	11	23	25,3	7,5	16	24	FR5	144 x 391 x 214
NXP00315A2H1SSSA1A200000	15	31	34	11	23	35	FR5	144 x 391 x 214
NXP00385A2H1SSSA1A200000	18,5	38	42	15	31	47	FR6	195 x 519 x 237
NXP00455A2H1SSSA1A200000	22	46	51	18,5	38	57	FR6	195 x 519 x 237
NXP00615A2H1SSSA1A200000	30	61	67	22	46	69	FR6	195 x 519 x 237
NXP00725A2H0SSSA1A200000	37	72	79	30	61	92	FR7	237 x 591 x 257
NXP00875A2H0SSSA1A200000	45	87	96	37	72	108	FR7	237 x 591 x 257
NXP01055A2H0SSSA1A200000	55	105	116	45	87	131	FR7	237 x 591 x 257
NXP01405A2H0SSSA1A200000	75	140	154	55	105	158	FR8	291 x 758 x 344
NXP01685A2H0SSSA1A200000	90	170	187	75	140	210	FR8	291 x 758 x 344
NXP02055A2H0SSSA1A200000	110	205	226	90	170	255	FR8	291 x 758 x 344
NXP02615A2H0SSFA1A200000	132	261	287	110	205	308	FR9	480 x 1150 x 362
NXP03005A2H0SSFA1A200000	160	300	330	132	245	368	FR9	480 x 1150 x 362

VACON NXP - Three Phase Input **525-690V**, Three Phase Output **3 x 525V IP21/Type 1**, Air-cooled, Wall-mounted, EMC Class L

Code	Low Overload Ratings			High Overload Ratings			Frame Size	Dimensions (mm) W x H x D
	Motor Power 690V (kW)	Continuous Current I _L (A)	110% Overload Current (A)	Motor Power 690V (kW)	Continuous Current I _H (A)	150% Overload Current (A)		
NXP00046A2L0SSSA1A200000	3	4,5	5	2,2	3,2	4,8	FR6	195 x 519 x 237
NXP00056A2L0SSSA1A200000	4	5,5	6,1	3	4,5	6,8	FR6	195 x 519 x 237
NXP00076A2L0SSSA1A200000	5,5	7,5	8,3	4	5,5	8,3	FR6	195 x 519 x 237
NXP00106A2L0SSSA1A200000	7,5	10	11	5,5	7,5	11,3	FR6	195 x 519 x 237
NXP00136A2L0SSSA1A200000	11	13,5	14,9	7,5	10	15	FR6	195 x 519 x 237
NXP00186A2L0SSSA1A200000	15	18	19,8	11	13,5	20,3	FR6	195 x 519 x 237
NXP00226A2L0SSSA1A200000	18,5	22	24,2	15	18	27	FR6	195 x 519 x 237
NXP00276A2L0SSSA1A200000	22	27	29,7	18,5	22	33	FR6	195 x 519 x 237
NXP00346A2L0SSSA1A200000	30	34	37	22	27	41	FR6	195 x 519 x 237
NXP00416A2L0SSSA1A200000	37,5	41	45	30	34	51	FR7	237 x 591 x 257
NXP00526A2L0SSSA1A200000	45	52	57	37,5	41	62	FR7	237 x 591 x 257
NXP00626A2L0SSSA1A200000	55	62	68	45	52	78	FR8	291 x 758 x 344
NXP00806A2L0SSSA1A200000	75	80	88	55	62	93	FR8	291 x 758 x 344
NXP01006A2L0SSSA1A200000	90	100	110	75	80	120	FR8	291 x 758 x 344
NXP01256A2L0SSFA1A200000	110	125	138	90	100	150	FR9	480 x 1150 x 362
NXP01446A2L0SSFA1A200000	132	144	158	110	125	188	FR9	480 x 1150 x 362
NXP01706A2L0SSFA1A200000	160	170	187	132	144	216	FR9	480 x 1150 x 362
NXP02086A2L0SSFA1A200000	200	208	229	160	170	255	FR9	480 x 1150 x 362

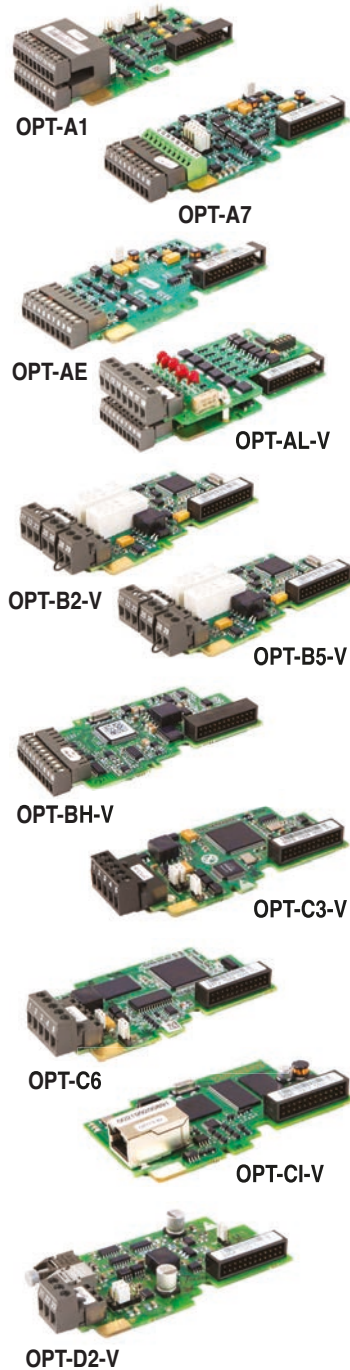
VACON® NX OPTIONS

VACON NX OPTIONS - Display panels, Door installation sets, RS232 cables, Fiber optic cables



Code	Description	Suitability
PAN-A	Alphanumeric display panel	NXP
PAM-G	Graphical display panel	NXP
Door installation sets		
DRA-02B	Door installation set for display panel, 2m cable	NXP
DRA-04B	Door installation set for display panel, 4m cable	NXP
RS232 cables		
RS232C-02M	2m RS232 serial link cable, pin to pin	NXP
RS232C-04M	4m RS232 serial link cable, pin to pin	NXP
RS232-01M	1,5m RS232 PC cable	NXP
Fiber optic cables for system bus (OPT-D1, OPT-D2)		
SYS-2M	Fiber optic cable (pair), 2m	NXP
SYS-4M	Fiber optic cable (pair), 4m	NXP
SYS-10M	Fiber optic cable (pair), 10m	NXP

VACON NX OPTIONS I/O cards



Code	Description	Suitability
OPT-A1	6DI, 1DO, 2AI(mA/V), 1AO(mA/V), +10 Vref, +24V/EXT+24V	NXP
OPT-A2	2RO(NO/NC)	NXP
OPT-A3-V	1RO(NO/NC), 1RO(NO), 1Thermistor Input	NXP
OPT-A4-V	3DI(Encoder RS422), 2DI (Qualifier+Fast Input), Out +5V/+15V/+24V	NXP
OPT-A5-V	3DI(Encoder 10...24V), 2DI (Qualifier+Fast Input), Out +15V/+24V	NXP
OPT-A7	Double encoder (Wide Range), 6DI, 2DO	NXP
OPT-A8	As OPT-A1 , but analog I/O and +10Vref galv. de-coupled as a group	NXP
OPT-A9	As OPT-A1 , but 2,5 mm ² terminals (Not with AF board)	NXP
OPT-AE	Encoder board (Wide Range), 3DI(Encoder 10...24 V), Out +15V/+24V, 2DO (encoder divider and direction)	NXP
OPT-AF-V	STO SIL2/PL"d" + ATEX appr. Thermistor, all boards need to be varnished	NXP
OPT-AK-V	SIN/COS encoder interface	NXP
OPT-AL-V	6DI (42...240VAC), 2AI, 2AO, 1DO, Out 15V / 24V	NXP
OPT-AN-V	6DI (Galv. de-coupled as a group), 2AI and 2AO (Programmable 0...20mA, 4...20mA, 0...10V, 2...10V, -10...+10V)	NXP
OPT-B1-V	6DI/DO (programmable, DI or DO)	NXP
OPT-B2-V	1RO(NO/NC), 1RO(NO), Thermistor Input	NXP
OPT-B4-V	1AI(mA, isolated), 2AO(mA, isolated), +24V/EXT+24V	NXP
OPT-B5-V	3RO(NO)	NXP
OPT-B8-V	3Pt100, +24 V/EXT+24 V	NXP
OPT-B9-V	1RO(NO), 5 pcs of 41...240 VAC input	NXP
OPT-BB	ENDAT encoder card, 2xDO (RS422)	NXP
OPT-BC	RESOLVER, 3x DO (Wide Range)	NXP
OPT-BE-V	SSI and Endat Encoders	NXP
OPT-BH-V	3 x Temp sensor inputs (PT100, PT1000, KTY84-130, KTY84-150, KTY84-131, NI1000)	NXP
OPT-BL-V	Advanced safety option, requires AF board	NXP
OPT-BM-V	Advanced safety option - Pulse encoder interface, requires AF board	NXP
OPT-BN-V	Advanced safety option - SIN/COS encoder interface, requires AF board	NXP
OPT-C2	Modbus RTU / N2	NXP
OPT-C3-V	Profibus DP	NXP
OPT-C4-V	LonWorks	NXP
OPT-C5-V	Profibus DP (D9 type connector)	NXP
OPT-C6	CANopen	NXP
OPT-C7-V	DeviceNet	NXP
OPT-C8	Modbus RTU / N2 (D9 type connector)	NXP
OPT-CI-V	Modbus TCP/IP	NXP
OPT-CJ-V	BACnet MS/TP	NXP
OPT-CG-V	S2 Protocol	NXP
OPT-CP-V	ProfiNet I/O	NXP
OPT-CQ-V	Ethernet/IP	NXP
OPT-D1	System Bus adapter (2x fiber optic cable)	NXP
OPT-D2-V	System Bus (1x fiber optic cable) & CAN-BUS (Galv. Decoupled)	NXP
OPT-D3	RS232 adapter card (not galvanically decoupled)	NXP
OPT-D6-V	CAN-Bus (Galv. Decoupled)	NXP
OPT-D7	Line voltage measurement board	NXP
OPT-E9-V	2-Port Ethernet option (Modbus TCP/UDP, PROFINET, EtherNet/IP, RSTP, MRP)	NXP
OPT-EC-V	EtherCAT field bus	NXP

*Consult the Drives Team for assistance in selecting the correct rating for your application.

VACON® NXP STANDALONE

Typical applications

- Auxiliary equipment
- Pump and fans
- Main propulsion and bow thrusters
- Compressors
- Cranes and lifts

Features

- Extremely compact cabinet enclosure
- Delivered with ultra rapid AC fuses
- Optional built-in brake chopper and DC-link connectors

Benefits

- Maximize the utilization of available space while reducing the overall costs
- No need to consider any additional protection components

Hardware Configurations

- **IP21** Standard
- **IP54** (FR10 only) Optional (H: +20mm)
- Integrated ultra rapid fuses Standard
- Load switch (IEC or UL version) Optional
- EMC filtering L (EN 61800-3, category C3) Standard
- EMC filtering T (for IT -networks) Optional
- Brake chopper (optional)
- Cabling top entry H: +122 mm



VACON® 100 FLOW - STANDALONE

The VACON 100® FLOW enclosed drives are designed to meet the most demanding requirements for flexibility, robustness, compactness and service-friendliness. They are a smart choice for many applications and available from 75 to 630 kW at 380-500 V and 75 to 800 kW at 525-690 V.

Features

- Separate cooling air channel
- Common mode and dU/dt filters integrated in cooling air channel
- Back channel cooling option available
- Fast acting aR input fuses as standard
- Integrated output filters and fuse switch as options
- Configured to order with pre-engineered options
- Door-mounted control compartment separate from the main drive
- I/O wired to standard terminal blocks
- Dedicated area for signal lights and control switches
- All components accessible from the front of the enclosure

Proven Solution

Our VACON® 100 enclosed drives are compact and tested to meet harsh operating conditions. They can be installed in many different standard applications such as pumps or conveyors. The innovative air-cooling channel ensures reliable thermal handling of the enclosure and provides extended lifetime of the drive with trouble-free operation in tough environments. Approved EMC solutions ensure reliable operation of the drive without disturbing other electrical equipment.



VACON® 3000 - MEDIUM VOLTAGE DRIVE

Easy to Handle

- Compact component size with high power density
- Manageable component weight
- All components allow cabinet integration with front access only
- Easy to handle, to lift, move, and repair

Easy to Integrate

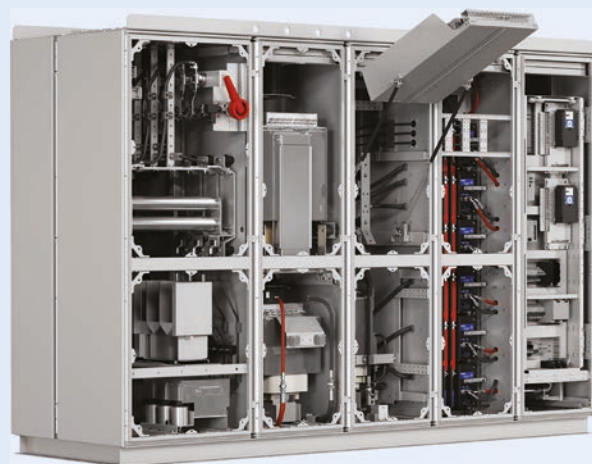
- Full harmonization, supports open solutions
- Customer-specific interface configuration of cabinet
- Customer-specific enclosure class

Robust and reliable in harsh conditions

- Designed for stability
- Long lifetime design of power modules with no cooling fans
- Rugged module enclosure provides good protection
- Reliable insulation
- Hybrid cooling of the chokes

High Performance

- High power density provides maximum power for minimal volume
- Efficient heat management using liquid-cooled power modules and hybrid-cooled chokes
- Very good speed and torque control, sensorless vector control
- AFE configurations connect to the grid without inrush current



VACON 3000
12-Pulse Diode Front End (DFE) Drivers



Pre-Charge



Inverter Unit



Choke

For any enquiries regarding drives and softstarters, contact our specialized team: drives@acdc.co.za



FU9000 DRIVES



- Open Loop
- Modbus-RTU Communication
- Automatic torque boost
- Slip Compensation
- Simplified parameters for easy start-up
- 4 Independent start-up ramps
- Flexible programmable I/O connection
- Comprehensive trip diagnostics
- Output frequency up to 500 Hz
- Built-in braking unit up to 18.5kW

General Purpose - FU9000D Series

Code	Input Current	Output Current	Rated Output Power	Dimensions (mm) W x H x D
Single Phase Input 220-240V, Three Phase Output 3 x 230V				
FU9000D-0R7G-S2	8.2A	4A	0.75kW	126 x 186 x 161
FU9000D-1R5G-S2	14A	7A	1.5kW	126 x 186 x 161
FU9000D-2R2G-S2	23A	9.6A	2.2kW	126 x 186 x 161
Three Phase Input 380-480V, Three Phase Output 3 x 400V				
FU9000D-0R7G-4	3.4A	2.1A	0.75kW	126 x 186 x 161
FU9000D-1R5G-4	5A	3.8A	1.5kW	126 x 186 x 161
FU9000D-2R2G-4	5.8A	5.1A	2.2kW	126 x 186 x 161
FU9000D-004G-4	10.5A	9A	3.7kW	126 x 186 x 161
FU9000D-5R5G-4	14.6A	13A	5.5kW	146 x 256 x 172
FU9000D-7R5G-4	20.5A	17A	7.5kW	146 x 256 x 172
FU9000D-011G-4	26A	25A	11kW	171 x 321 x 201
FU9000D-015G-4	35A	32A	15kW	171 x 321 x 201
FU9000D-018G-4	38.5A	37A	18.5kW	171 x 321 x 201



- Open Loop
- Modbus-RTU Communication
- Automatic torque boost
- Slip Compensation
- Simplified parameters for easy start up
- 4 Independent Start-up Ramps
- Flexible programmable I/O connection
- Comprehensive trip diagnostics
- Output frequency up to 500 Hz
- Built-in braking unit up to 18.5kW

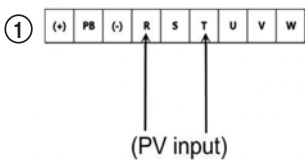
Solar - FU9000SI Series

Code	Max. PV Voc	DC Input Voltage Range	Rated Output Power	Max.PV Isc	Rated Output Current	Dimensions (mm) W x H x D
Single Phase Input 220-240V, Three Phase Output 3 x 230V						
FU9000SI-0R7G-S2	400VDC	200~400VDC	0.75kW	9.3A	4.2A	126 x 186 x 161
FU9000SI-1R5G-S2	400VDC	200~400VDC	1.5kW	15.7A	7.5A	126 x 186 x 161
FU9000SI-2R2G-S2	400VDC	200~400VDC	2.2kW	24A	10A	126 x 186 x 161
Three Phase Input 380-480V, Three Phase Output 3 x 400V						
FU9000SI-0R7G-4	800VDC	300~750VDC	0.75kW	3.4A	2.5A	126 x 186 x 161
FU9000SI-1R5G-4	800VDC	300~750VDC	1.5kW	5A	4.5A	126 x 186 x 161
FU9000SI-2R2G-4	800VDC	300~750VDC	2.2kW	5.8A	5.5A	126 x 186 x 161
FU9000SI-004G-4	800VDC	300~750VDC	4kW	13.5A	9.5A	126 x 186 x 161
FU9000SI-5R5G-4	800VDC	300~750VDC	5.5kW	19.5A	14A	146 x 256 x 172
FU9000SI-7R5G-4	800VDC	300~750VDC	7.5kW	25A	18.5A	146 x 256 x 172
FU9000SI-011G-4	800VDC	300~750VDC	11kW	32A	25A	171 x 321 x 201
FU9000SI-015G-4	800VDC	300~750VDC	15kW	40A	32A	171 x 321 x 201
FU9000SI-018G-4	800VDC	300~750VDC	18.5kW	47A	38A	171 x 321 x 201

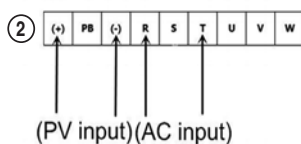
Wiring Diagrams

NOTE: AC & PV Inputs cannot be used at the same time

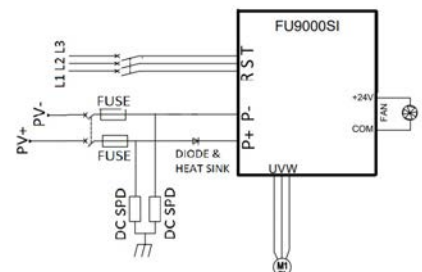
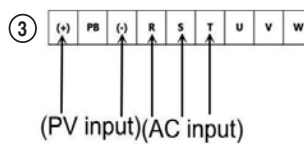
PV only - Single / 3Phase



PV + AC - Single Phase



PV + AC - 3Phase



CAT5-P1M-G



FU900KH

Accessories

Code	Description
FU9000KH	Panel Mount Remote Keypad Holder
CAT5-P1M-G	Keypad Cable 1m
CAT5-P3M-G	Keypad Cable 3m

AUCOM CSXi SOFT STARTER SERIES

CSXi Series

Control Voltage: 220V
Input Voltage: 3 Phase 200-575V

- Compact Size
- Integrated Bypass Contactors
- Essential Motor Protection
- Simple to Use
- The **CSXi** soft starter is a Constant Current / Current Ramp system, complete with current measurement and control.
- In addition to soft start and soft stop, the **CSXi** provides a range of motor protection functions, including motor overload, phase loss and excess start time.
- The **CSXi** also features a programmable relay.



Rated Current*		Code	Dimensions (mm) H x W x D
Light Duty	Heavy Duty		
18A	17A	CSXi-007-61	203 x 89 x 165
34A	30A	CSXi-015-61	203 x 89 x 165
48A	40A	CSXi-022-61	203 x 89 x 165
60A	49A	CSXi-030-61	203 x 89 x 165
75A	65A	CSXi-037-61	215 x 145 x 193
85A	73A	CSXi-045-61	215 x 145 x 193
100A	96A	CSXi-055-61	215 x 145 x 193
140A	120A	CSXi-075-61	240 x 202 x 214
200A	142A	CSXi-090-61	240 x 202 x 214
165A	165A	CSXi-110-61	240 x 202 x 214

AUCOM EMX3 SOFT STARTER SERIES

Control Voltage: 220V
Input Voltage: 3 Phase 380-690V

- Advanced Start & Stop Control Functions
- Full Graphical LCD Display with Real Language Text
- **IP65** Remote Mountable Keypad (Optional) (Mounting kit ordered separately)
- Integrated Bypass Contactors
- Extensive Motor Protections
- The **EMX3** is a comprehensive motor management system for the most demanding soft starting and stopping applications.
- With an impressive range of features, the **EMX3** delivers superior performance and an unprecedented level of flexibility in a compact and user-friendly package.
- The **EMX3** doesn't just start and stop your machinery with Constant Current and Current Ramp, it also features the innovative XLR-8 Adaptive Acceleration Control. XLR-8 gives you the ability to precisely manage your starting and stopping acceleration, reducing downtime and eliminating water hammer problems.



Rated Current*		Code	Dimensions (mm) H x W x D	Rated Current*		Code	Dimensions (mm) H x W x D
Light Duty	Heavy Duty			Light Duty	Heavy Duty		
23A	17A	EMX3-0023B-711	295 x 156 x 192	350A	284A	EMX3-0350B-711	440 x 424 x 298
43A	31A	EMX3-0043B-711	295 x 156 x 192	425A	355A	EMX3-0425B-711	440 x 424 x 298
50A	37A	EMX3-0050B-711	295 x 156 x 192	500A	383A	EMX3-0500B-711	620 x 430 x 296
76A	55A	EMX3-0076B-711	295 x 156 x 223	580A	425A	EMX3-0580B-711	620 x 430 x 296
105A	95A	EMX3-0105B-711	295 x 156 x 223	700A	512A	EMX3-0700B-711	620 x 430 x 296
145A	106A	EMX3-0145B-711	438 x 282 x 250	820A	606A	EMX3-0820B-711	620 x 430 x 296
170A	121A	EMX3-0170B-711	438 x 282 x 250	920A	684A	EMX3-0920B-711	620 x 430 x 296
220A	178A	EMX3-0220B-711	438 x 282 x 250	1000A	796A	EMX3-1000B-711	620 x 430 x 296
255A	201A	EMX3-0255B-711	440 x 424 x 298				

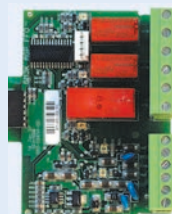
Accessories



995-04938-00



995-08133-00



995-04803-00



995-04804-00



PIM

Code	Description	Code	Description
995-04938-00	EMX3 Keypad	PIM-MB-01	Modbus Interface
995-08133-00	EMX3 Keypad Mounting Kit (3m)	PIM-PB-01	Profibus Interface
995-04803-00	EMX3 I/O Expansion Card	PIM-USB-01	USB Interface
995-04804-00	EMX3 RTD/Ground Fault Expansion Card	PIM-MT-01	Modbus TCP Interface
PIM-DN-01	DeviceNet Interface	PIM-PN-01	Profinet Interface
		PIM-EI-01	Ethernet IP Interface

AUCOM EMX4 SOFT STARTER SERIES

Features and Options

Description	EMX4e	EMX4i
Motor Control		
Motor sets	1	2
Constant current and current ramp start	✓	✓
Adaptive control starting/stopping	✓	✓
Kickstart	-	✓
Coast to stop and TVR stop	✓	✓
DC brake	-	✓
Soft brake	-	✓
Jog (forward and reverse)	-	✓
Inside delta (6 wire) control	-	✓
Soft trip	-	✓
Motor Protection		
Motor thermistor	✓	✓
Current imbalance	✓	✓
Under/Overcurrent	✓	✓
Phase sequence	✓	✓
Phase loss	✓	✓
Power loss	✓	✓
Integration and Management		
Multi-language graphical display	✓	✓
I/O and network expansion options	✓	✓
USB port and data logging	✓	✓
Analog output	✓	✓
Emergency run	✓	✓
SCR fail PowerThrough operation	-	✓
Daily on/off scheduling	-	✓
Communications Options		
Modbus RTU	✓	✓
Profibus	✓	✓
DeviceNet	✓	✓
Modbus TCP	✓	✓
ProfiNET	✓	✓
Ethernet IP	✓	✓
Smart Card Options		
Pumping Smart Card	✓	✓
Accessories		
Remote HMI	✓	✓



Start Here



Select a starter and diagnose issues for AuCom soft starters from the palm of your hand with the AuCom Start Here app.



Application or Industry Specific smart cards allow the EMX4 to act as a system controller, simplifying system design, installation & setup.

The **EMX4** simplifies the installation and operation of motor starting systems to reduce installation cost and time.

XLR-8 Acceleration Control

Torque or Current Control start modes influence acceleration but only XLR-8 puts you in direct control of ramp profiles and start times. Select a ramp profile and time then let the **EMX4** do the rest. XLR-8 technology auto-tunes for the connected motor and load conditions to deliver the specified performance.

EMX4 Accessories

Code	Description
PIC-RC-01	Remote Keypad Card
PIC-RC-02	Remote Keypad Card & Keypad with cable & mounting kit
PIC-RK-01	Remote Keypad, with cable & mounting kit
995-17309-00	Fingerguard Kit, 0184B ~ 0580B, IP20
SCC-PC-01	Smart Control Card Pump Application
PIC-MB-01	Modbus RTU Card,
PIC-DN-01	DeviceNet Card
PIC-PB-01	Profibus Card
PIC-MT-01	Modbus TCP Card
PIC-EI-01	Ethernet IP Card
PIC-PN-01	Profinet Card

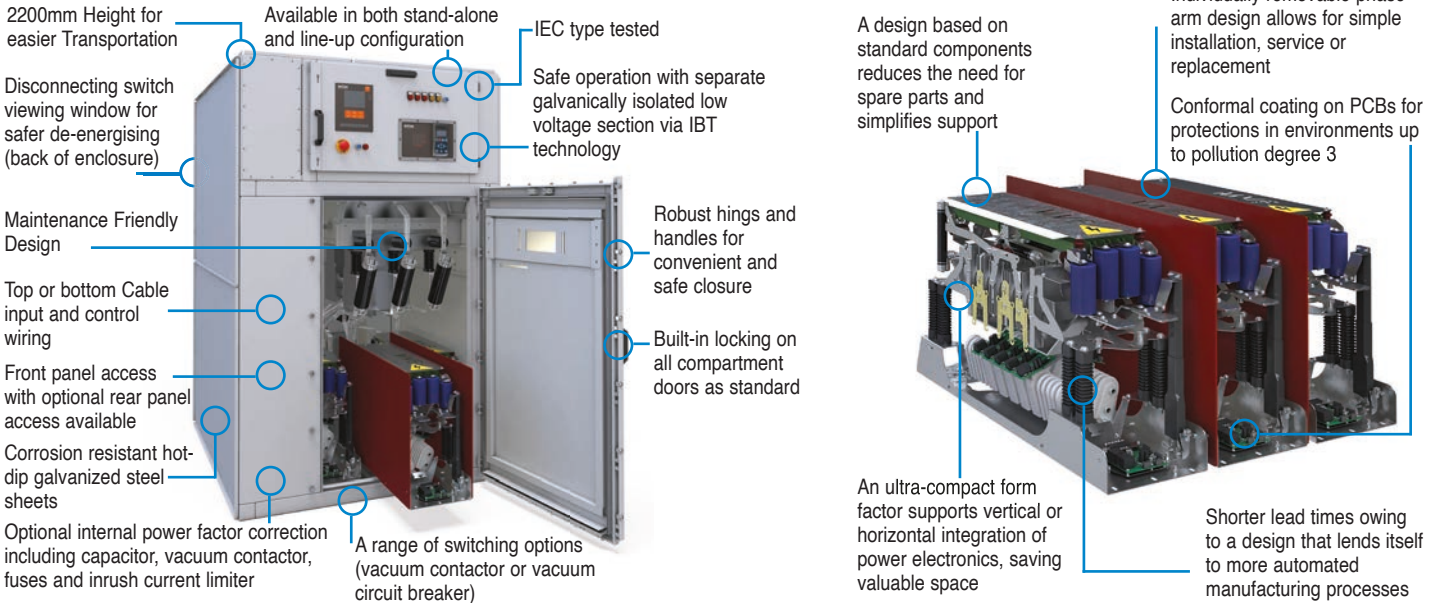
EMX4 Digital Soft Starter - Control Voltage: 230V

Code EMX4E (200-525VAC Input)	Code EMX4I (200-525VAC Input)	Code EMX4I (200-690VAC Input)	Rated Current*		Dimensions (mm) W x H x D
			Light Duty	Heavy Duty	
EMX4E-0024B-511	EMX4I-0024B-511	EMX4I-0024B-711	24A	18A	152 x 336 x 231
EMX4E-0042B-511	EMX4I-0042B-511	EMX4I-0042B-711	42A	31A	152 x 336 x 231
EMX4E-0052B-511	EMX4I-0052B-511	EMX4I-0052B-711	52A	39A	152 x 336 x 231
EMX4E-0064B-511	EMX4I-0064B-511	EMX4I-0064B-711	64A	62A	152 x 336 x 231
EMX4E-0069B-511	EMX4I-0069B-511	EMX4I-0069B-711	69A	69A	152 x 336 x 231
EMX4E-0105B-511	EMX4I-0105B-511	EMX4I-0105B-711	105A	83A	152 x 336 x 231
EMX4E-0115B-511	EMX4I-0115B-511	EMX4I-0115B-711	115A	103A	152 x 336 x 231
EMX4E-0135B-511	EMX4I-0135B-511	EMX4I-0135B-711	135A	125A	152 x 336 x 231
EMX4E-0184B-511	EMX4I-0184B-511	EMX4I-0184B-711	184A	138A	216 x 495 x 243
EMX4E-0200B-511	EMX4I-0200B-511	EMX4I-0200B-711	200A	163A	216 x 495 x 243
EMX4E-0229B-511	EMX4I-0229B-511	EMX4I-0229B-711	229A	171A	216 x 495 x 243
EMX4E-0250B-511	EMX4I-0250B-511	EMX4I-0250B-711	250A	227A	216 x 495 x 243
EMX4E-0352B-511	EMX4I-0352B-511	EMX4I-0352B-711	352A	264A	216 x 523 x 243
EMX4E-0397B-511	EMX4I-0397B-511	EMX4I-0397B-711	397A	297A	216 x 523 x 243
EMX4E-0410B-511	EMX4I-0410B-511	EMX4I-0410B-711	410A	410A	216 x 523 x 243
EMX4E-0550B-511	EMX4I-0550B-511	EMX4I-0550B-711	550A	500A	216 x 523 x 243
EMX4E-0580B-511	EMX4I-0580B-511	EMX4I-0580B-711	580A	550A	216 x 523 x 243

*Consult the Drives Team for assistance in selecting the correct rating for your application.

AUCOM L-SERIES MVE SOFT STARTER SERIES

The **MVE** soft starter is a powerful and reliable solution for your medium voltage starting requirements. Extensive personal safety features, and easy-to use graphical interface, and comprehensive built-in motor/load protection make this a well balanced solution for your needs. **MVE** brings together sophisticated soft start motor control functionality in a robust yet compact physical configuration. **MVE** is available as a fully furnished cabinet, or we can retrofit **MVE** into your existing system. Turn-key **MVE** kit-type soft starters can be installed with minimal downtime. In addition to standard packages, we can supply a complete line-up to meet your requirements.



□ - MVE - □□□□ - V□□ - SC□□ - E□ - F□ - L□ - B□ - PF□
 1 2 3 4 5 6 7 8 9

A Solution for any application

1. Panel Type		3. Supply Voltage		6. Fuse	
L	L-Series IEC standard	V02	2300 VAC 50/60 Hz	F0	Without fuse
M	M-Series IEC standard	V03	3300 VAC 50/60 Hz	F1	With fuse
P	P-Series NEMA standard	V04	4160 VAC 50/60 Hz	7. Line Switching Device	
2. Current Rating @ AC53b 4-30 : 1770		V06	6600 VAC 50/60 Hz	L0	Without line switching device
0070	70A 1100 1100A	V11	11000 VAC 50/60 Hz	L1	Fixed line vacuum contactor
0110	110A 1200 1200A	V13	13800 VAC 50/60 Hz	L2	Withdrawable line vacuum contactor
0200	200A 1300 1300A	4. Short Circuit Level		L3	Fixed line vacuum circuit breaker
0220	220A 1400 1400A	SC16	16 kA	L4	Withdrawable line vacuum circuit breaker
0250	250A 1500 1500A	SC20	20 kA	8. Bypass Switching Device	
0300	300A 1600 1600A	SC25	25 kA	B0	Without bypass switching device
0400	400A 1700 1700A	SC31	31.5 kA	B1	Fixed bypass vacuum contactor
0450	450A	SC40	40 kA	B2	Withdrawable bypass vacuum contactor
0500	500A	SC50	50 kA	B3	Fixed bypass vacuum circuit breaker
0540	540A	5. Enclosure Configuration		B4	Withdrawable bypass vacuum circuit breaker
0600	600A	E0	Soft starter in panel only	9. Internal PFC	
0700	700A	E1	Soft starter + bypass device	PF0	Without PFC
0800	800A	E2	Soft starter + line device + bypass device	PF1	With PFC
0900	900A	E3	Soft starter + disconnector switch + line device + bypass device		
1000	1000A				

Possible Applications

Contact drives division for a complete solution: drives@acdc.co.za

Description	Water / Wastewater	Power generation	Pulp / Paper	Chemical / Petrochemical	Mining	Cement / Stone	Wood processing	Building technology	Marine / Off shore	Industry / Production
Pump	✓	✓	✓	✓	-	-	-	✓	✓	✓
Fan/Blower/Aerator	✓	✓	-	✓	✓	✓	-	✓	-	✓
Compressor	-	✓	-	✓	-	-	-	✓	✓	✓
Chiller	-	-	-	✓	-	-	✓	✓	✓	✓
Refiner	-	-	✓	-	-	-	✓	-	-	-
Extruder	-	-	-	✓	-	-	-	-	-	-
Centrifuge	-	-	-	✓	-	-	-	-	-	✓
Mill crusher	-	✓	-	-	✓	✓	-	-	-	-
Hacker	-	-	✓	-	-	-	✓	-	-	-
Conveyor	-	✓	-	-	✓	✓	-	-	-	✓
Roller	-	✓	-	-	-	-	-	-	-	✓
Rotating converter	-	✓	-	-	-	-	-	✓	✓	✓
Bow thruster	-	-	-	-	-	-	-	-	✓	-
Main propulsion	-	-	-	-	-	-	-	-	✓	-

NEW

VLT SOFT STARTER



MCD100 DIN Rail Mounted Soft Starter IP20 - Three Phase Input

Technical Highlights

- 0-10s adjustable ramp up & down time
- Adjustable initial torque up to 85%
- Auto detection of missing phase
- 24-480VAC/VDC universal control voltage
- Digitally controlled rotary switches
- secures precise settings and simplifies installations
- A universal control voltage
- (24-480VAC/VDC)- simplifies selection and keeps stock at a minimum

Code	Max Motor Power(kW)	Max Full Load Current(A)	Input Voltage	Frame Size	Dimensions (mm) W x H x D
175G4001	1,5	3	400-415VAC	S	23 x 102 x 124
175G4005	7,5	15	400-480VAC	M	45 x 110 x 128
175G4008	11	25	400-480VAC	L	90 x 110 x 128

* Maximum motor power is dependant on supply voltage

- Ratings for heavy duty as standard
- simplifies installation and reduces the risk of breakdown
- Can be used for an almost unlimited number of starts per hour without derating
- A "fit and forget" contactor design
- simplifies installation and reduces required panel space
- A robust semiconductor design
- selection can be based on motor power which ensures easy selection

INTEGRA INTELLIGENT ENERGY EFFICIENT SOFT STARTERS

While Stocks Last



For Smooth Starting

Integra is one of the finest energy saving soft-starters in the world with a wide range of adjustable features that allow you to start even the most awkward load with ease.

- Fully adjustable ramp times from 0-255 seconds
- For high inertia loads current limit will provide you with a reduced current start.

- A kick start facility will help you to get things moving on loads with high static friction.

For Energy Reduction

Integra will quietly work on your behalf to:

- Ensure that your motors only consume the energy that they require
- Significantly reduce your energy bills
- Reduce levels of unscheduled breakdowns
- Switch your motors off automatically when they are not needed
- Protect the motors from excess heat and vibration

For Soft Starting

Using Integra as a soft-starter will put you back in control by:

- Significantly increasing the life of your contactors & drive train
- Preventing dips in supply when starting larger motors components
- Allowing you to attach more equipment to a single supply
- Reducing the worrying threat of peak demand penalties when starting
- Allowing you to switch your motors on and off at any time because of reduced start current

For Controlled Stopping

Through controlled deceleration, Integra Soft Stop:

- Provides an effective solution to minimise water hammer
- Reduces the probability of damage to pipe systems
- Provides safe, cost effective plug braking

In Practice

Integra works hard on your behalf:

- Assessing the load on the motor every cycle of the supply
- Adjusting the voltage proportionately to the load
- Preventing the motor from stalling by monitoring motor flux

Code 220-480V - 3ph	Code 525-575V - 3ph	Maximum Full Load Current	Motor kW		Cooling	Semi-Conductor Fuses	Dimensions (mm) W x H x D
			@380-480V	@525-575V			
SI-15/V220-480	SI-15/V575	30A	15	22	Natural	N/A	130 x 315 x120
SI-22/V220-480	SI-22/V575	42A	22	30			
SI-30/V220-480/F220	SI-30/V575/F220	53A	30	37	Forced	N/A	130 x 385 x 215
SI-37/V220-480/F220	SI-37/V575/F220	65A	37	45			
SI-55/V220-480/F220	SI-55/V575/F220	97A	55	75			
SI-75/V220-480/F220	-	145A	75	110	Forced	Fitted	305 x 448 x 205
SI-90/V220-480/F220	SI-90/V575/F220	170A	90	132			
SI-110/V220-480/F220	SI-110/V575/F220	205A	110	150	Forced	Fitted	380 x 670 x 225
SI-132/V220-480/F220	SI-132/V575/F220	255A	132	186			
SI-150/V220-480/F220	SI-150/V575/F220	290A	150	220			
SI-186/V220-480/F220	SI-186/V575/F220	340A	186	260			
SI-225/V220-480/F220	SI-225/V575/F220	410A	225	315	Forced	Fitted	480 x 750 x 265
SI-260/V220-480/F-UN	-	475A	260	375			
SI-315/V220-480/F-UN	-	580A	315	450			

TECHNICAL INFORMATION

Utilization Categories IEC 947-4-1

A.C. Contactors/Relays

Category	Description & Application
AC-1	Non-Inductive/Slightly Inductive Loads - Heaters, Resistance Furnaces etc.
AC-2	Slip Ring Motors (Start/Stop/Reverse) - Wire Drawing, Stone Crushing
AC-3	Squirrel Cage Motors (Start/Stop/Reverse) - Compressors, Mixers, Conveyors
AC-4	Squirrel Cage Motors (Plugging & Inching) -Cranes, Hoists
AC5a	Switching of Electrical Discharge Lamps - Mercury Lamp, Sodium Vapour Lamp
AC5b	Switching of Incandescent Lamps - Tungsten Filament Lamp
AC6a	Switching of Transformers - Switching of LT Transformer with Load (contactor on transformer primary)
AC6b	Switching of Capacitor Banks - Switching of Capacitor Bank for PF Correction
AC7a	Slightly Inductive Load in Household Appliances and Similar Applications - Switching of Fans, Mixers, Blenders etc.
AC7b	Motor Load for Household Application - Washing Machine, Dish Washer, etc.
AC8a	Hermetic Refrigerant Compressor Motor Control with Manual Resetting of Overloads - Refrigeration
AC8b	Hermetic Refrigerant Compressor Motor Control with Automatic Resetting of Overloads - Window Air Conditioners

A.C. Switches/Isolators

Category	Description & Application
AC-12	Control of Resistive Loads and Solid State Loads with Isolation by Opto Couplers
AC-13	Control of Solid State Loads with Transformer Isolation
AC-14	Control of Small Electromagnetic Loads ($\leq 72VA$)
AC-15	Control of Electromagnetic Loads ($>72VA$)
AC-20	Connecting and disconnecting under no-load conditions
AC-21	Switching of resistive loads including moderate overloads
AC-22	Switching of mixed resistive and inductive loads including moderate overloads
AC-23	Switching of motor loads or other highly inductive loads

D.C. Contactors/Relays

Category	Description & Application
DC-1	Non-Inductive/Slightly Inductive Loads - Heaters, Resistance Furnaces
DC-3	Shunt Motors (Starting, Plugging & Inching) Dynamic breaking of DC Motors - Shunt Motors, Textile Ind., Steel Ind.
DC-5	Series Motor (Starting, Plugging & Inching) Dynamic Breaking of DC Motors - Series Motor Used in EMU's, Lifts, Hoists
DC-6	Incandescent Lamps - Light used In Railways Coaches

D.C. Switches/Isolators

Category	Description & Application
DC-12	Control of Resistive Loads and Solid State Loads with Isolation by Opto Couplers
DC-13	Control of DC Electromagnets
DC-14	Control of Electromagnetic Loads Having Economy Resistors in Circuit
DC-20	Connecting and disconnecting under no-load conditions
DC-21	Switching of resistive loads including moderate overloads
DC-22	Switching of mixed resistive and inductive loads including moderate overloads
DC-23	Switching of motor loads or other highly inductive loads

IP Rating for Enclosures – IEC 529

FIRST CHARACTERISTIC NUMERAL:

Protection against ingress of solid foreign objects and against access to dangerous parts

Meaning	0	1	2	3	4	5	6
Protection against ingress of:	No Protection	Solid objects larger than $\varnothing 50mm$	Solid objects larger than $\varnothing 12,5mm$	Solid objects larger than $\varnothing 2,5mm$	Solid objects larger than $\varnothing 1mm$	Dust in a harmful quantity	Dust (total protection)
Personal protection against access with:	No Protection	Back of hand	Finger	Tool		Wire	

SECOND CHARACTERISTIC NUMERAL:

Protection against water

Meaning	0	1	2	3	4	5	6	7	8	9
Protection against effect of:	No Protection	Vertically falling drops of water	Vertically falling drops of water with maximum inclination of 15°	Rain	Splashing water	Water jet	Powerful water jet	Temporary immersion	Continuous immersion	Powerful hot water jet

Example

Protection against ingress of dust in a harmful quantity

IP 5 4

Protected against effects of splashing water

TECHNICAL INFORMATION

Standard F.L.C. data for 4 Pole motors

Rated Power		Standard 3-Phase 4 pole motors Line Connected				Phase Connected (Star-Delta)*		Single Phase Motors
kW	Hp	380V A	400V A	550V A	1000V A	380V A	400V A	230V A
0.37	0.5	1	1	0.72	0.4	-	-	3.4
0.55	0.75	1.6	1.5	1.16	0.64	-	-	4.6
0.75	1	2	1.9	1.4	0.75	-	-	5.8
1.1	1.5	2.6	2.5	1.9	1	-	-	8.4
1.5	2	3.5	3.3	2.5	1.3	-	-	11.2
2.2	3	5	4.7	3.6	1.9	-	-	16.4
3	4	6.6	6.3	4.8	2.5	-	-	21
4	5.5	8.5	8.1	6.2	3.3	4.9	4.7	28
5.5	7.5	11.5	10.9	8.6	4.5	6.7	6.3	37
7.5	10	15.5	14.7	11.5	6	9	8.5	-
10	13.5	20	19	14.3	7.5	11.6	11	-
11	15	22	21	16	8.7	12.8	12	-
15	20	30	28.5	22	12	17.4	16.6	-
18.5	25	37	35	27	14.3	21	20	-
22	30	44	42	32	17	25	24	-
30	40	60	57	43	23	35	33	-
37	50	72.5	69	53	28	42	40	-
45	60	85	81	62	33	49	47	-
55	75	105	100	76	40	64	61	-
75	100	138	131	100	53	79	75	-
90	125	170	161	123	65	99	94	-
110	150	205	195	152	78	119	113	-
132	175	245	233	179	91	142	135	-
160	220	300	285	218	117	174	165	-
200	270	370	351	268	149	215	204	-
220	300	408	388	296	161	237	225	-
250	350	475	451	344	200	275	262	-
315	430	584	555	422	240	339	322	-
355	480	636	604	477	265	369	350	-
375	500	670	636	503	278	389	369	-
425	580	760	722	548	303	441	419	-

* These are the values of F.L.C. as seen by the overload and main/delta contactors when phase connected within a Star-Delta starter.

Note: Always check the rating plate of the motor when commissioning *before* switching on.

Cable ratings

3 & 4 Core copper PVC/SWA/PVC 600/1000V cables - SABS 1507/1990

Cable Size (mm ²)	Electrical Properties			Gland Size Type ACG	Gland Size		
	Current Ratings		Volt Drop		3 Core	4 Core	5 Core
	Ground A	Ducts A	Air A	(mV/A/m)			
1.5	23	18	18	25.080	0	0	0
2.5	30	24	24	15.363	0	0/1	2
4	38	31	32	9.561	1	1	2
6	48	39	40	6.391	1	2	3
10	64	52	54	3.793	2	2	
16	82	67	72	2.390	2	2/3	
25	126	101	113	1.515	3	3	
35	147	120	136	1.097	3	3/4	
50	176	144	167	0.817	4	4	
70	215	175	207	0.576	4	4/5	
95	257	210	253	0.427	4/5	5	
120	292	239	293	0.348	5	5/6	
150	328	369	336	0.294	5	6	
185	369	303	384	0.250	6	6	
240	422	348	447	0.211	6	7	
300	472	397	509	0.189	6/7	7	

Borehole pump motor F.L.C. data

100mm submersible motors

kW	F.L.C.	
	230V Amps	400V Amps
0.25	3.1	-
0.37	3.9	1.3
0.56	5.0	1.6
0.75	6.0	2.2
1.12	8.8	3.0
1.50	11.8	3.9
2.20	17.0	5.9
3	-	7.2
4	-	9.3
5.5	-	13.2

Note:

Always check the rating plate of the motor when commissioning *before* switching on. Borehole pumps and motors require specialised protection. For a wide range of protection devices as well as special borehole control panels, see pages 40 and 41.



LONGMEADOW

26 Nguni Drive, Longmeadow
Business Estate West, Edenvale
Gauteng
Tel: +27 10 202 3300
Fax: +27 10 202 3365
Email: info@acdc.co.za

GERMISTON

Sharland Street, Driehoek,
Germiston, Gauteng
Tel: +27 11 418 9600
Fax: +27 11 418 9633
Email: germiston@acdc.co.za

CAPE TOWN

Richmond Southern Close, Lenie
Adams Avenue, Richmond Park
Tel: +27 21 492 2000
Fax: +27 87 807 5279
Email: cape@acdc.co.za

PINETOWN

Unit 10, Pine Industrial Estate
Pineside Road, New Germany
Pinetown, Kwa-Zulu Natal
Tel: +27 31 700 4215
Fax: +27 31 700 4330
Email: kzn@acdc.co.za

RIVERHORS

6 Riverhorse Close Riverhorse
Valley Business Estate,
Durban, Kwa-Zulu Natal
Tel: +27 31 492 4800
Fax: +27 87 405 0775
Email: rvh@acdc.co.za

FOLLOW US ON SOCIAL MEDIA



Specifications are subject to change from time to time,
without notification in this publication.

© ACDC Dynamics 2022

NATIONAL CALL CENTRES: SALES - 010 202 3400 | TECHNICAL - 010 202 3500

THINK ELECTRICAL