Frequency converters
VEDA-in RD30 for crane applications

Specially designed for crane applications, **RD30 Crane Drive** effectively delivers hoist drive capabilities. Also, can be used as a travel drive.

With an intuitive and easy to use software, Frequency converter (FC) offers a simple and fast configuration settings. With a dedicated setting for selecting the application type, FC saves the commissioning time, eliminates possible errors during setup and ensures optimal performance.

RD30 delivers an advanced functional package most demanded for crane applications:

- Improved mechanical brake control algorithm.
- Zero speed load holding during start and stop.
- Reverse with brake released.
- Heavy duty braking transistors.
- Dedicated starting mode for hoisting applications.
- Supports TTL and HTL-type encoders.
- PTC and PT100 motor thermistors monitoring.
- Limit switch signals processing.
- 3C3 boards with basic anti-corrosion coating.
- Supports various communication protocols: Modbus RTU (built-in), Modbus TCP/IP, CANopen, Profinet, Profibus.

RD05 Basic
Compact general-purpose industrial drives rated up to 22 kW offer easy configuration capabilities and can be used for travel drives.

RD11 UNI
for travel drives. For demanding applications requiring higher functionality than RD05 or for remote control over any communication protocol other than Modbus RTU.

Specifications

Output power	RD30, RD11: 0.75 – 560 kW (*other ratings by request*) RD05: 0.75 – 22 kW
Input voltage	RD30, RD11: 3 x 380 – 480 V, 3 x 660 – 690 V (*by request*) RD05: 3 × 380 V
Output voltage	0 – 100% of input voltage (*error < 5%*)
Output frequency	0 – 299 Hz ± 0.5%
Motor type	Asynchronous, PM synchronous
Motor control mode	RD30, RD11: VF mode, closed/open loop vector control RD05: VF mode, sensorless vector control
Overload capacity	RD30, RD11: 150 % — 89 sec, 180 % — 10 sec, 200 % — 3 sec RD05: 150 % — 60 sec, 180 % — 5 sec, 200 % — 0.5 sec
Housing	IP 20, IP 54 for RD30, RD11
Operating temperature	–10 °C ... 50 °C
Humidity	5 – 95%, without condensate
Storage temperature	–30 °C ... 60 °C
Vibration	0.6 g for 9 – 200 Hz range

Power options

Item	Description
Braking resistors	Required component for hoisting and travel drives (with rare exceptions).
External braking module	For FC 75 kW and higher.
Motor choke	For increasing motor cable length and reducing du/dt.
Line choke	Reduces harmonic distortions from power mains, compensates for transient surges and unbalanced input voltage, improves FC service life and reliability.
DC choke (factory installed option)	Reduces harmonic distortions from power mains, compensates for voltage fluctuations and current surges in the DC link, improves FC service life and reliability.
EMC filter	Complies with category C2. For applications with high EMC requirements.

RD30 Crane Drive and RD11 UNI options

Order code	Description
11A00PAC005	VF-101 Encoder option 5V
11A00PAC006	VF-101 Encoder option 12V
11A00PAC010	External graphical operator panel
11A00PAC004	I/O Expansion Option
11A00PAC002	Profibus option
11A00PAC003	Profinet option
11A00PAC008	CANopen option
11A00PAC014	EtherCat option
11A00PAC013	Modbus TCP/IP option

Industrial grade VEDA-in PLC

VIC-B series are general-purpose controllers offering a simple architecture, a wide range of functions and an excellent price-performance ratio.

VIC-S series offers a high-performance models with a simple architecture and a wide range of functions.
Based on VIC-S series, VIC-SM series controllers deliver an improved motion control functions. PLC can be used for positioning and movement synchronization of actuators.

Expansion modules and options include I/O expansion modules, communication modules supporting various protocols, power options, cables and HMI panels for expanded PLC functionality.

VEDA-in HMI operator panels

VEDA-in HMI is a new line of operator panels developed in close cooperation with VEDA-in specialists. Operator panels represent a single solution for clear and convenient visualization of parameters and controls.
For touch panel configuration and setup, you can use a dedicated development environment VEDA-in HCT. The development environment is free and can be downloaded from the website.