



CONTROLLER Series

Reactor Controllers

The innovative solutions to manage and monitor the shaft rotation speed of brushless motors in lab-scale reactor systems of up to 100 L



CONTROLLER Advance

Glass reaction systems are used in a wide variety of industrial fields to control chemical processes to transform the raw materials into the desired final products. The VELP CONTROLLER Advance is the innovative and cloud enabled solution to manage and monitor the shaft rotation speed of brushless motors in lab-scale reactor systems of up to 100 L.

INTUITIVE AND PRECISE

- TFT 3.5" Display showing all setting information at a glance
- Real time torque, speed and temperature graph monitoring
- Precise digital speed control: ± 1 rpm
- Intuitive knob to navigate the menu and start stop operations
- PT100 Probe connection for temperature monitoring (-200°C to +550°C)



PROGRAMMABLE OPERATIONS

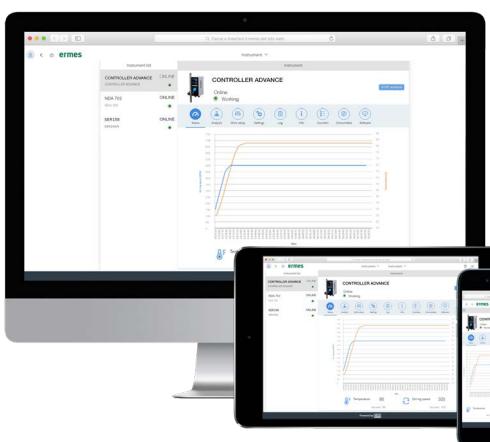
- Programmable methods to setup to 4 time/speed ramps
- Timer for unattended operations
- Easy CW/CCW stirring direction changes
- Safety lock button to avoid unintentional changes with settings

EXCLUSIVE CONNECTIVITY AND DATA LOGGING

- Wi-Fi connection to VELP ERMES platform to monitor status and data logging on the cloud
- Cloud-based service assistance and software updates
- USB interface for OHS/ControllerSoft software to data log, monitor, turn off/ turn on.



VELP ERMES CONNECTION



Connect the Controller Advance to the exclusive VELP Ermes Cloud Platform to improve your laboratory experience. The VELP Ermes Cloud platform connection will unburden you from tedious tasks, improving your lab productivity.

- Real time monitor and control of the instrument from PC, smartphone and tablet whenever you want, wherever you are
- Immediate alert and notification with the possibility to stop the instrument for maximum safety
- Regular software updates will guarantee the best performance and new features with just one-click

ermes enabled

CONTROLLER Digital

Glass reaction systems are used for a wide variety of industrial fields to control chemical processes to transform the raw materials into the desired final products. The CONTROLLER Digital is the VELP entry-level solution to manage and monitor the shaft rotation speed of brushless motors in lab-scale reactor systems of up to 100 L.

EASY-TO-USE

- Digital display for precisely set stirring speed
- Torque monitoring through the dedicated 4 segment Led display
- Precise speed control: ± 1 rpm
- Intuitive knob to navigate the menu and start/stop operations

SMART

- Timer for unattended operations
- Easy CW/CCW stirring direction change
- Safety lock button to avoid unintentional changes with settings



Safety Lock



OPTIONAL ACCESSORIES



A00000394
Pt100 Probe
XL Ø 6 500mm



A00000391
OHS
ControllerSoft



E00010012
VELP Ermes 1
Year Connection



E00010036
VELP Ermes 3
Year Connection

INSTRUMENT - CODE

Controller Advance	115-230 V / 50-60 Hz	F201A0500
Controller Digital	115-230 V / 50-60 Hz	F201A0505

VELP Brushless Motors

The Controller Advance and Digital are compatible with the following VELP brushless motors.



A00000415
Motor 10 lb*in, 417 rpm,
1/11 HP -24V



A00000416
Motor 28 lb*in, 500 rpm,
1/4 HP -24V



A00000417
Motor 55 lb*in, 250 rpm,
1/4 HP -24V

TORQUE	113 N*cm (10 lb*in)	316 N*cm (28 lb*in)	621 N*cm (55 lb*in)
SPEED RANGE	20 - 417 rpm	35 - 500 rpm	15 - 250 rpm
POWER SUPPLY	24 V	24 V	24 V
POWER	68 W (1/11 HP)	187 W (1/4 HP)	187 W (1/4 HP)
MOTOR SHAFT DIAMETER	11 mm	19 mm	19 mm
MOTOR SHAFT LENGTH	31,4 mm	42,4 mm	42,4 mm
CABLES LENGTH	1,5 m	1,5 m	1,5 m
REACTOR VOLUME	Up to 25 liters of water	Up to 50 liters of water	Up to 100 liters of water



CONTROLLER Digital + Motor 10 lb*in, 471 rpm , 1/11 HP - 24V



CONTROLLER Advance + Motor 55 lb*in, 250 rpm , 1/4 HP - 24V

TECHNICAL DATA

	CONTROLLER Advance	CONTROLLER Digital
DISPLAY	3,5" Graphic TFT Display	Digital Display
USER INTERFACE	Digital	Digital
TORQUE COMPENSATION	SpeedServo™	SpeedServo™
STIRRING SPEED RANGE	35-500 rpm (depends on the motor)	35-500 rpm (depends on the motor)
STIRRING DIRECTION	Clockwise/Counterclockwise	Clockwise/Counterclockwise
SPEED ACCURACY	1 rpm step	1 rpm step
SPEED CONTROL	Digital	Digital
FIXING SYSTEM	Shafts up to Ø 20mm, on both sides	Shafts up to Ø 20mm, on both sides
SAFETY VIBRATION SENSOR	Yes	-
TIMER	Yes	Yes
METHOD SETTING	Yes	-
LOCK OF THE INSTRUMENT	Yes	Yes
EXTERNAL PROBE CONNECTION	Yes, Pt100	-
TEMPERATURE MEASURING RANGE	-200 to 550 °C	-
TEMPERATURE RESOLUTION	0.1 °C	-
CONNECTIVITY	USB / Wi-Fi	USB, only for software update
VELP ERMES CLOUD PLATFORM	Yes	-
OHS/CONTROLLER SOFT	Yes	-
DIMENSIONS (WxHxD)	90x180x170 mm (3.54x7.10x6.70 in)	90x180x170 mm (3.54x7.10x6.70 in)
WEIGHT	2,5 kg (5,51 lb)	2,5 kg (5,51 lb)



SERVICE & SUPPORT

GET THE SUPPORT YOU NEED CHOOSING THE OPTIONS:

- Help-desk and Remote support
- Technical Assistance
- Analytical Support



VELP Scientifica products are designed by our engineers to resist years of laboratory use. Our products are manufactured with premium materials to guarantee the best performance with maximum safety. According to our experience, a proper and regular maintenance is necessary to ensure the highest performance of analytical instrument. VELP Service Department and VELP Official Partners are always ready to offer you maintenance and service support tailored to your needs.



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VELP Official Partner



DESIGNED AND MANUFACTURED IN ITALY



ITALY - HQ
Via Stazione 16
20865 Usmate (MB) Italy
Tel. +39 039 628811
velpitalia@velp.com

INDIA
velpindia@velp.com

USA
155 Keyland Court, Bohemia
NY 11716 - U.S.
Tel. +1 631 573 6002
velpusa@velp.com

CHINA
Xinlong Rd Building 28, Lane 1333
Shanghai city - China
Tel. +86 180 1755 7329
velpchina@velp.com