

Correction sheet

Correction to Installation & Operating Instructions for SL1.20 / SLV.25 / DP04 / EF12, part number 93223544. These sections below replace the version in the Installation & Operating Instructions.

Level controllers

Suitable level controllers:

- LC 231: compact solution with certified motor protection for single- and dual-pump versions.
- LC 241: cabinet solution offering modularity and customisation for single- and dual-pump versions.
- Dedicated Controls (DC): high-end cabinet solution for multi-pump versions up to 6 pumps.

In the following description, "level switches" can be air bells, float switches, or electrodes depending on the selected pump controller. Depending on the security and the number of pumps, level switches can be used in the following setups:

- Dry run (optional)
- Stop
- Start pump 1 (single-pump version)
- Start pump 2 (dual-pump version)
- High level (optional)

An analog level transmitter can be used and all levels can be customised. Level switches can be used with level transmitters (one for dry and one for high level). When installing the level switches, observe the following points:

- To prevent air intake and vibrations, install the stop level switch so the pump is stopped before the liquid level is lowered to the middle of the motor housing.
- Install the start level switch so the pump is started at the required level. The pump must always be started before the liquid level reaches the bottom of the inlet pipe.
- Always install the high-level alarm switch about 0.4" above the start level switch. However, the alarm must always be given before the liquid level reaches the inlet pipe.

For further settings, see the installation and operating instructions for the selected pump controller.



The pump must not run dry.

Install an additional level switch to ensure that the pump is stopped in case the stop level switch is not operating.

The pump must be stopped when the liquid level reaches the upper edge of the clamp. For more information see section Start and Stop level.

Single-phase pumps

For capacitor size, see the table below:

Pump type	Run capacitor	
	[µF]	[V]
SL1 and SLV	30	450
DP and EF	30	450

Winding resistances



These values are valid for 68 °F environmental temperature. Resistance tolerance is ± 10 %.

Motor size [hp]	Single-phase motor	
	Starting winding	Main winding
1.5 - 2.0	4.5 Ω	2.75 Ω
2.0	4.1 Ω	2.9 Ω
	Three-phase motor	
	3 x 230 V	3 x 400 V
1.5 - 2.0	6.8 Ω	9.1 Ω

The table values do not include the cable. Resistance in the cables: 2 x 33 ft (10 m), approximately 0.28 Ω.

Explanation: $R_s = R_m (T_s + T_k) / (T_m + T_k)$:

R_s : Resistance value to be calculated at a specific temperature (68°F/20 °C).

R_m : Resistance value measured.

T_m : Temperature at which the was measured.

T_k : Winding material constant (235 in case of copper) .