

RCL 5300, software version 28_19

In week 38-2011 we have introduced a new software version 28_19 for the RCL 5300 controller on all HMF cranes.

The software is accessible via the CGW 5355 service terminal. When carrying out an Online Update, the CGW will be updated and will then have:

- Sw.Ver 9 (software version) menu item 4.1
- Menu Ver 1.67 (menu version) menu item 4.9

The 28 19 software lies in the "Download" - "RCL 5300" menu (menu item 1.2.1.3).

Changes in the software version 28_19

In software version 28_19 the following changes have among other things been implemented:

- 1. The functionality of the EVS System has been improved.
 - Faster reaction time from the moment where maximum heel has been reached ("Max margin"), till the dump valve opens and the crane stops. If the 28_19 is downloaded to an RCL on a crane with EVS, it may be necessary to adjust "Max Margin" again. It may be possible to adjust to a higher value.
 - The ramp time out of HDL in connection with EVS is increased, which improves control of in particular the slewing function. When slewing into a direction where the vehicle is heeling less, the slewing speed will slowly increase, as the system changes proportionally from HDL to normal crane mode.

Please note: the ramp time can only be changed by means of the CGW 5355 (Sw.Ver 9) and only as from the RCL 5300 software version 28 19.

- 2. The "EMC boom sensing" parameter (CGW 1.1.1.1.20), which on radio remote controlled cranes offers the possibility of having a signal from the spool sensors in case of emergency operation, has been changed so that there is also an EVS functionality in emergency operation mode.
 - The "Sensing" feature (CGW- 1.1.1.1.2.8.3) set for "Sensor" ⇒ the RCL controls according to signals from the spool sensors both in case of radio remote control and emergency operation.
 - "Sensing" set for "RC" 🗢 the RCL only controls according to signals from the radio remote control.
- 3. The SSO (Stabilizer Safe Override) function has been implemented. The SSO function can be used in situations where you need to work with the crane without having to fully extend the stabilizer beams and lower the stabilizer legs. Furthermore there are the following changes:
 - When activating the SSO function, "SSO" is indicated in the RCL display, there is a periodic signal from the buzzer, and the crane is derated to the pre-set load moment - "SSO derate" (CGW -1.1.1.1.24.4).

The SSO derate is pre-set at HMF to 40 %. By means of a CGW is can be adjusted to a value between 1 % and 70 %.

- The SSO function is also active with the stabilizer beams extended/the stabilizer legs down ⇒ there is also the SSO functionality, when a detachable crane is removed and re-fitted.
- When the SSO function is activated, the EVS system is deactivated, i.e. EVS is de-selected in the "Features" menu in SSO mode. The function makes it possible to remove and re-fit a detachable crane without the EVS system interfering.
- When the SSO function is activated the regeneration system is deactivated (valid for cranes with electrically activated regeneration). The output signals are high in the SSO situation.
- 4. Via the Blue Mode function (the OPT-button on the RCL 5300 indicator panel), the lifting capacity of the winch is reduced when lifting in the wire rope led via the manual extensions. By means of the CGW, the lifting capacity can be adjusted in "Calibration" - "Manual extension" - "Winch" (CGW - 1.1.1.1.2.6.6.1).
- 5. When a crane is fitted with personnel basket, there is a new set of parameters (previously setting of the HDL speed) for setting of the crane speed in basket mode. It is possible to set this by means of the CGW in "Crew lifting" (CGW - 1.1.1.1.1.16). It is not possible to work with personnel basket in crane mode. A high signal from the heel sensor of the basket -- at the same time as crane mode has been selected - will entail a crane stop with error code 273.

Furthermore new functions and parameters have been implemented in connection with a coming new radio remote control system as well as a new version of the AIC 5062 controller. A separate information about this will follow, as soon as these systems are implemented on the cranes.





In connection with customer requirements about the SSO functionality there have been different "Build versions" of the RCL 5300 software in circulation - e.g. a version 27-B5_18-B5. It has turned out that some of these versions may entail problems with unstable download with the CGW 5355.

If the following messages appear in the CGW display when downloading the RCL software version 28_19, it is possible to carry on as indicated in the example below:



Text 1: Errors 200 Continue ⇒ Press ENT







Text 3: Profile read error Ignore: ⇒ Press ENT

Then the automatic download procedure is finished and the RCL 5300 must be repowered. Check the crane profile (in particular "Features" and "input/output") before starting up the crane.