Encoder alignment guide for the Ziehll Abegg 4C connected to a gearless machine.

Installation State:

1. Lift on inspection control with no faults and inspection buttons operating correctly.
2. Drive settings:

   Within MOTOR NAME PLATE

   MOT_TYP = Set to SMxxx if using a motor other than a Ziehl Abegg
   n = Rated speed - RPM
   f = Frequency - HZ
   p = Pole pairs of the motor
   TYP = Enter the motors type of connection

   Within ENCODER & BC

   ENC_TYP = Set to encoder type being used
   ENC_INC = Enter the encoder pulses - PPR
   BC_TYP = Enter the used braking resistor

   Within INSTALLATION

   V* = Installation's rated speed in m/s
   _D = Diameter of the traction sheave
   _iS = Installation's roping arrangement

*If once moving the rotation is the wrong way this can be adjusted within **CONTROL SYSTEM** by changing MO_DR*

3. At this point you should now be able to attempt one of two options for Encoder angle offset alignment. These are "NO LOAD" for ropes off and "ON HALT" for when ropes are fitted.
   NOTE: If using a new Ziehl Abegg machine the encoder offset should come up with a factory setting of 0.

For **ROPES OFF** Encoder angle offset learn, Go to **ENCODER ADJUSTMENT**

I. Select ENC_ADJ and ensure ENC_OFF is set to 0 degrees. Now change to NO LOAD.
II. ZA will ask ARE YOU SURE? Press YES
III. ZA will display BRAKES WILL BE OPENED WITH NO TORQUE TO MOTOR – DO YOU WISH TO PROCEED? Press YES.
IV. Press and hold either a test up or test down command. This alignment test can take up to 120 seconds to complete.
V. Motor voltage & current is then applied to the motor and an encoder alignment is underway, If all is ok the STOP INSPECTION will be displayed, at this point release the test up or test down command.
VI. ZA will show PROCESS SUCCESFULLY COMPLETED Press OK
VII. The lift should now be able to move on INSPECTION CONTROL, please observe the direction of travel and check this is correct, if the direction is incorrect then adjust MO_DR in CONTROL SYSTEM within the drive unit.

For **ROPES ON** Encoder angle offset learn, Go to **ENCODER ADJUSTMENT**

I. Select ENC_ADJ and ensure ENC_OFF is set to 0 degrees. Now change to ON HALT
II. ZA will ask ARE YOU SURE Press YES
III. Disconnect the brake coil wiring.
IV . ZA will ask IS BRAKE WIRING DISCONNECTED? Press YES.
V. Press and hold either a test up or test down command. This alignment test can take up to 120 seconds to complete.
VI. Motor voltage & current is then applied to the motor and an encoder alignment is underway, If all is ok the STOP INSPECTION will be displayed, at this point release the Test up or Test down command.
VII. ZA will show PROCESS SUCCESFULLY COMPLETED Press OK
VIII. Reconnect brake wiring.
IX. The lift should now be able to move on INSPECTION CONTROL, please observe the direction of travel and check this is correct, if the direction is incorrect then adjust MO_DR in CONTROL SYSTEM within the drive unit.

If needed please contact technical@lestercontrols.co.uk where someone will be able to assist.