

# PRODUCT DATASHEET



## HELICAL **BEVEL** GEARED MOTOR WITH ACCESSORIES/MOTOR

**DATE** 09.05.2018

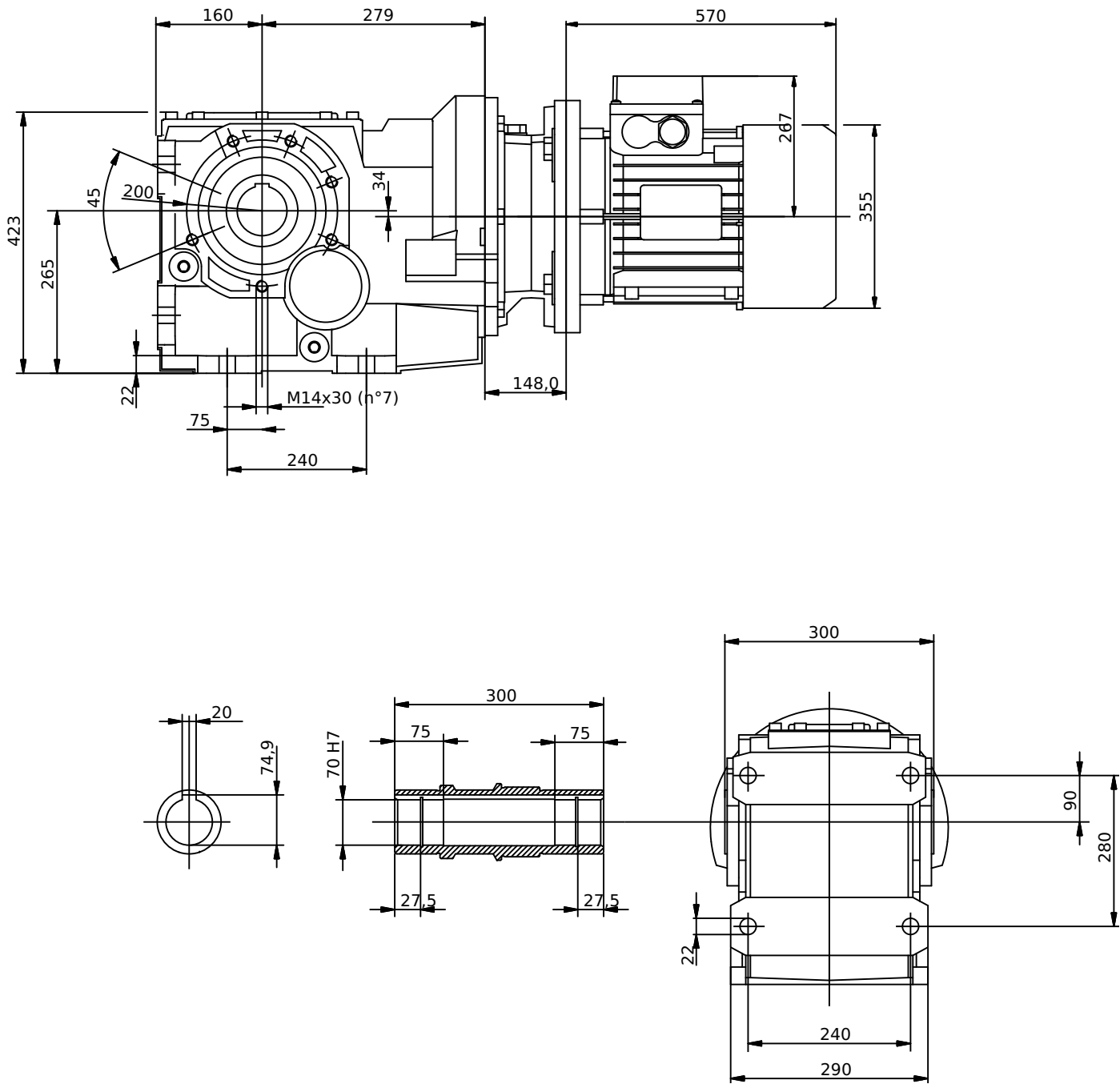
## CONFIGURATION

## PRODUCT DATASHEET

| CHARACTERISTIC        | VALUE                          |
|-----------------------|--------------------------------|
| Motor/Inverter Motor  | With Motor                     |
| Regulations           | No                             |
| Bevel Helical         | PAM B                          |
| Size                  | 143                            |
| Housing Version       | U-Universal                    |
| Output Shaft Version  | C-Hollow Shaft                 |
| Ratio (i)             | 30,05                          |
| Input Dim.            | Ø350x48 (IEC180 B5)            |
| Output Shaft Dim.     | Ø70                            |
| ON-Oil Plugs          | Breather-Drain-Level(Stand.)   |
| Mounting Position     | B3                             |
| Output Flange         | No                             |
| Output Shaft          | No                             |
| Torque Arm            | No                             |
| ON-Output Oil Seal    | NBR-Nitrile                    |
| ON-Input Oil Seal     | NBR-Nitrile                    |
| ON-Lubrication        | Eni Blasias 220                |
| Paint                 | Ral 5010 Blue                  |
| Supplier              | Motovario                      |
| Regulations           | CE                             |
| Motor                 | Three-Phase                    |
| Size                  | 180M                           |
| Series                | Premium Efficiency             |
| Poles                 | 4                              |
| Electrical Execution  | Std (Voltage Tolerance +/- 5%) |
| Service               | S1                             |
| Voltage               | 220/380V                       |
| Frequency             | 50-60 Hz                       |
| Power                 | 18,5 kW                        |
| Cooling               | Self-Ventilated                |
| Mounting Arrangements | B5                             |
| Terminal Box          | Pos.1                          |
| Flange Dim.           | Ø350                           |
| Shaft Dim. (DE)       | Ø48x110                        |
| Rear Shaft End (NDE)  | No                             |
| Insulation Rating     | F                              |
| Protection Rating     | IP55                           |
| Thermal Protectors    | 3x BNC 150°C+3x PTC 150°C      |
| Ambient Conditions    | Standard                       |
| Heaters               | No                             |

| CHARACTERISTIC        | VALUE    |
|-----------------------|----------|
| Condensation Drainage | Pos.1    |
| Devices               | No       |
| Accessories           | None     |
| Terminal Box Cover    | Steel    |
| Fan                   | Plastic  |
| Fan Cover             | Standard |
| MO-Notes              | No       |

Values expressed in [mm]



PERFORMANCES

18,50 kW (50Hz)

| n2<br>[rpm] | M2<br>[Nm] | fs  | i     | Gear<br>reducer | Motor   | Fr2<br>D-S-P [N] | Fr2<br>C [N] |
|-------------|------------|-----|-------|-----------------|---------|------------------|--------------|
| 48,9        | 3250       | 1,4 | 30,05 | B143            | TP180M4 | 24210            | 24210        |

# MOUNTING POSITIONS

The mounting position of the gear unit identifies its space orientation. B3 mounting position, as from a technical point of view, ensures lower oil splash, better lubrication and less heating.



- For the reduction units B series it is always necessary to specify the mounting position.
- The reduction units BA.. series with 2, 3 stages and B060, are supplied complete with lubricant, have no oil plugs and need no maintenance.
- The gear reducer B series sizes 080, 100, 125, 140, 150, 160 are supplied complete with lubricant and are fitted with oil plugs to suit any mounting position included in the catalogue.

It is recommended, after installation, to replace the closed plug used for transportation with the supplied breather plug. Oil quantity in the table (litres ~) are indicative; for a proper use you will have to refer to the level plug or the dipstick. Any level difference could depend on construction tolerances, but also by the placement of the unit or by the mounting surface at the customer's premises. It is appropriate to check and, if necessary, restores the level when the units are installed.

| B     | A42  | A52  | A53  | A72 | A73  |
|-------|------|------|------|-----|------|
| B3    | 0,33 | 0,42 | 0,63 | 1   | 1,21 |
| B8    |      |      |      |     |      |
| B6/B7 |      |      |      |     |      |
| V5    |      |      |      |     |      |
| V6    |      |      |      |     |      |

| CB    | A42  | A52  | A53  | A72 | A73  |
|-------|------|------|------|-----|------|
| B3    | 0,33 | 0,42 | 0,55 | 1   | 1,13 |
| B8    |      |      |      |     |      |
| B6/B7 |      |      |      |     |      |
| V5    |      |      |      |     |      |
| V6    |      |      |      |     |      |

| B-CB | 063 | 083 | 103 | 123 | 143  | 153  | 163  |
|------|-----|-----|-----|-----|------|------|------|
| B3   | 1,2 | 2,5 | 3,7 | 5,7 | 11,1 | 19   | 33   |
| B8   | 1,5 | 2,8 | 4,2 | 7,9 | 13   | 17,5 | 42,8 |
| B6   | 1,5 | 3,5 | 6   | 8,5 | 14,5 | 26   | 43   |
| B7   | 1,5 | 2,8 | 3,9 | 7,3 | 11,8 | 19   | 30   |
| V5   | 2,1 | 3,7 | 7   | 9,9 | 18,5 | 32,5 | 54,5 |
| V6   | 1,3 | 2,6 | 4,5 | 6,7 | 10,8 | 16,5 | 37,3 |

## DIRECTION OF ROTATION

Helical bevel reduction units are supplied as “standard” with rotation as shown in the diagram. On request, the direction of rotation of low speed shaft can be reversed; in this case, it is necessary to specify “opposite rotation to catalogue” when ordering. The “opposite rotation to catalogue” is not possible for sizes BA42 - BA52 - BA53.

## DIRECTION OF ROTATION - HIGH SPEED SHAFT

## B-CB-IB A42-A52-A72

VERSIONS **C-D-P-L**VERSION **S**

## B-CB-IB A53-A73

VERSIONS **C-D-P-L**VERSION **S**

## B-PB-CB-IB 063-163

VERSIONS **C-D-P-L**VERSION **S-M**