

# PRO28

THREE-PHASE BRUSHLESS SYNCHRONOUS ALTERNATORS WITH ELECTRONIC REGULATION - 4 POLES  
 ALTERNATEURS SYNCHRONES TRIPHASÉ SANS BALAIS AVEC RÉGULATION ÉLECTRONIQUE - 4 POLES  
 DREIPHASIGE BÜRSTENLOSE SYNCHROGENERATOREN MIT ELEKTRONISCHER REGULIERUNG - 4 POLEN



## 50Hz - 1500rpm - cosφ = 0.8

| TIPO - TYPE | Potenza resa<br>Rating Power [kVA] |                                  |                                  |                        | Rendimento<br>Efficiency |       | Volume d'aria<br>Air volume |
|-------------|------------------------------------|----------------------------------|----------------------------------|------------------------|--------------------------|-------|-----------------------------|
|             | Nominal                            | Class H<br>T <sub>A</sub> = 40°C | Class F<br>T <sub>A</sub> = 40°C | Stand By<br>163°C/27°C | 4/4                      | 3/4   | [m <sup>3</sup> / min]      |
| PRO28S A/4  | 180                                | 180                              | 160                              | 200                    | 91.8%                    | 92.2% | 32.0                        |
| PRO28S B/4  | 200                                | 200                              | 175                              | 220                    | 91.7%                    | 92.3% | 32.0                        |
| PRO28S C/4  | 225                                | 225                              | 200                              | 265                    | 92.1%                    | 92.5% | 32.5                        |
| PRO28S D/4  | 250                                | 250                              | 210                              | 280                    | 92.7%                    | 93.1% | 36.5                        |
| PRO28M E/4  | 300                                | 300                              | 250                              | 325                    | 92.9%                    | 93.3% | 38.5                        |
| PRO28M F/4  | 350                                | 350                              | 300                              | 375                    | 93.7%                    | 93.9% | 39.5                        |
| PRO28L G/4* | 400                                | 400                              | 360                              | 420                    | 93.8%                    | 94.0% | 44.4                        |

## 60Hz - 1800rpm - cosφ = 0.8

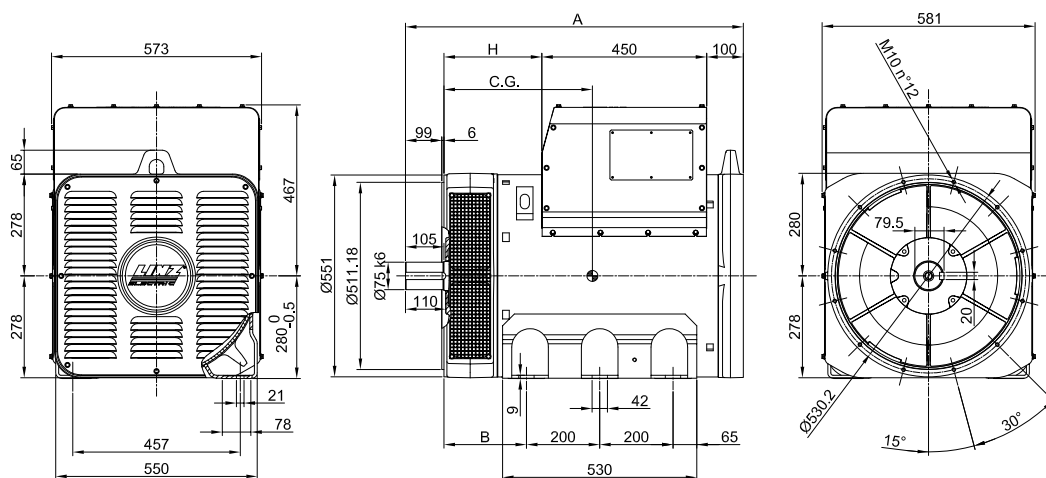
| TIPO - TYPE | Potenza resa<br>Rating Power [kVA] |                                  |                                  |                        | Rendimento<br>Efficiency |       | Volume d'aria<br>Air volume |
|-------------|------------------------------------|----------------------------------|----------------------------------|------------------------|--------------------------|-------|-----------------------------|
|             | Nominal                            | Class H<br>T <sub>A</sub> = 40°C | Class F<br>T <sub>A</sub> = 40°C | Stand By<br>163°C/27°C | 4/4                      | 3/4   | [m <sup>3</sup> / min]      |
| PRO28S A/4  | 215                                | 215                              | 192                              | 240                    | 92.5%                    | 92.7% | 38.0                        |
| PRO28S B/4  | 240                                | 240                              | 210                              | 265                    | 92.5%                    | 93.1% | 38.0                        |
| PRO28S C/4  | 270                                | 270                              | 240                              | 315                    | 92.7%                    | 93.0% | 39.0                        |
| PRO28S D/4  | 300                                | 300                              | 250                              | 335                    | 93.2%                    | 93.6% | 43.1                        |
| PRO28M E/4  | 360                                | 360                              | 300                              | 390                    | 93.3%                    | 93.7% | 43.4                        |
| PRO28M F/4  | 420                                | 420                              | 360                              | 450                    | 94.0%                    | 94.2% | 45.0                        |
| PRO28L G/4* | 480                                | 480                              | 430                              | 500                    | 94.2%                    | 94.4% | 49.6                        |

| TIPO - TYPE | Potenza resa<br>Rating power [kVA] |      | Momento di inerzia<br>Momentum of inertia [kg·m <sup>2</sup> ] |              |        | Peso<br>Weight [kg] |        |
|-------------|------------------------------------|------|----------------------------------------------------------------|--------------|--------|---------------------|--------|
|             | 50Hz                               | 60Hz | B2<br>SAE 11 ½                                                 | B2<br>SAE 14 | B3/B14 | B2 SAE              | B3/B14 |
| PRO28S A/4  | 180                                | 215  | 2.302                                                          | 2.417        | 2.123  | 564                 | 575    |
| PRO28S B/4  | 200                                | 240  | 2.445                                                          | 2.560        | 2.265  | 591                 | 602    |
| PRO28S C/4  | 225                                | 270  | 2.902                                                          | 3.018        | 2.723  | 668                 | 679    |
| PRO28S D/4  | 250                                | 300  | 3.252                                                          | 3.368        | 3.073  | 730.5               | 741.5  |
| PRO28M E/4  | 300                                | 360  | 3.721                                                          | 3.836        | 3.542  | 833.5               | 844.5  |
| PRO28M F/4  | 350                                | 420  | 4.408                                                          | 4.524        | 4.229  | 949                 | 960    |
| PRO28L G/4* | 400                                | 480  | 4.916                                                          | 5.032        | 4.737  | 1034                | 1045   |

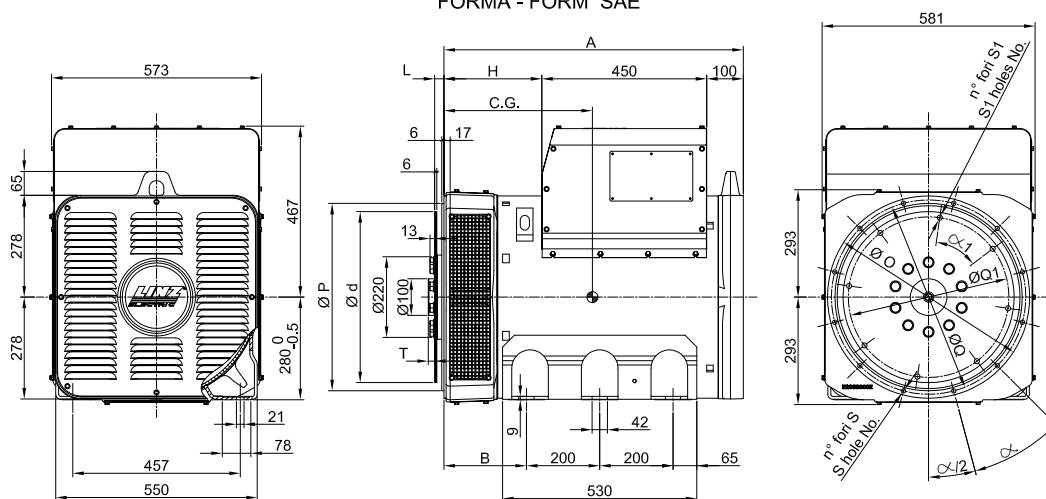
| TIPO - TYPE | Potenza resa<br>Rating power [kVA] |      | Reattanze e costanti di tempo (230/400V 50Hz)<br>Reactances and time constants (230/400V 50Hz) |                |                 |                  |                |                  |                 | Avvolg. principale<br>Main winding |                  |
|-------------|------------------------------------|------|------------------------------------------------------------------------------------------------|----------------|-----------------|------------------|----------------|------------------|-----------------|------------------------------------|------------------|
|             | 50Hz                               | 60Hz | pcc                                                                                            | X <sub>d</sub> | X' <sub>d</sub> | X'' <sub>d</sub> | X <sub>q</sub> | T' <sub>do</sub> | T' <sub>d</sub> | T'' <sub>d</sub>                   | R<br>[Ω at 20°C] |
|             |                                    |      |                                                                                                |                |                 |                  |                | [ms]             |                 |                                    |                  |
| PRO28S A/4  | 180                                | 215  | 0.32                                                                                           | 360%           | 19.0%           | 10.0%            | 217%           | 1830             | 112             | 16                                 | 0.0286           |
| PRO28S B/4  | 200                                | 240  | 0.34                                                                                           | 389%           | 21.0%           | 11.1%            | 239%           | 1810             | 113             | 17                                 | 0.0266           |
| PRO28S C/4  | 225                                | 270  | 0.36                                                                                           | 359%           | 20.3%           | 10.2%            | 228%           | 1825             | 113             | 16                                 | 0.0166           |
| PRO28S D/4  | 250                                | 300  | 0.38                                                                                           | 350%           | 18.0%           | 10.0%            | 212%           | 1850             | 115             | 14                                 | 0.0124           |
| PRO28M E/4  | 300                                | 360  | 0.39                                                                                           | 352%           | 18.5%           | 9.0%             | 210%           | 1850             | 116             | 14                                 | 0.0110           |
| PRO28M F/4  | 350                                | 420  | 0.40                                                                                           | 340%           | 18.0%           | 8.5%             | 212%           | 1870             | 115             | 13                                 | 0.0086           |
| PRO28L G/4* | 400                                | 480  | 0.41                                                                                           | 330%           | 18.0%           | 9.0%             | 210%           | 1910             | 116             | 14                                 | 0.0056           |

## OVERALL DIMENSIONS PRO28- ENCOMBREMENT PRO28 - GRÖSSE PRO28

FORMA - FORM B3/B14



FORMA - FORM SAE



| FORMA - FORM | A       | B    | H   |
|--------------|---------|------|-----|
| B3/B14       | PRO 28S | 922  | 225 |
|              | PRO 28M | 1072 | 417 |
|              | PRO 28L | 1137 | 482 |
| SAE          | PRO 28S | 817  | 225 |
|              | PRO 28M | 967  | 417 |
|              | PRO 28L | 1032 | 482 |

| TIPO - TYPE | C.G. |
|-------------|------|
| PRO28S A/4  | 376  |
| PRO28S B/4  | 380  |
| PRO28S C/4  | 394  |
| PRO28S D/4  | 406  |
| PRO28M E/4  | 452  |
| PRO28M F/4  | 480  |
| PRO28L G/4  | 513  |

| SAE | FLANGIE - FLANGES - BRIDAS |        |       |                   |    |     |
|-----|----------------------------|--------|-------|-------------------|----|-----|
| N.  | Ø O                        | Ø P    | Ø Q   | n. fori holes No. | S  | α   |
| 3   | 451                        | 409.6  | 428.6 | 12                | 12 | 30° |
| 2   | 490                        | 447.68 | 466.7 |                   |    |     |
| 1   | 552                        | 511.18 | 530.2 |                   |    |     |

| SAE    | GIUNTI A DISCO -COUPLING DISCS- JUNTAS A DISCOS |        |        |                   |      |     |      |
|--------|-------------------------------------------------|--------|--------|-------------------|------|-----|------|
| N.     | L                                               | Ø d    | Ø Q1   | n. fori holes No. | S1   | α1  | T    |
| 11 1/2 | 39.6                                            | 352.42 | 333.37 | 8                 | 10.5 | 45° | 0    |
| 14     | 25.4                                            | 466.72 | 438.15 | 8                 | 14   | 45° | 17.3 |