



## ALMCU SERIES 28-3000 kVA

### STANDARD SPECIFICATIONS

#### › Diesel Engine

- Oil pressure, temperature sensor
- Electronic or mechanic governor
- Exhaust gases compensator and industrial type silencer
- Radiator with mechanical fan
- Protective grille for fan and rotating parts
- Standard air, oil, fuel filter
- Starting battery (with lead aid) including rack and cables
- Engine jacket water heater

#### › AC Generator

- Three-phase brushless
- 4 pole alternator
- Short circuit current > 300%

#### › Chassis

- Steel chassis
- Fuel tank integrated in the chassis
- Anti-vibration shock absorbers
- Hoisting points reinforced for crane lifting
- Robust construction designed for continuous and emergency applications

#### › Canopy

- Soundproof insulation made of high density material
- High mechanical resistance
- Low level of sound emissions
- Door with window to visualize control panel, alarms and measurements
- Emergency stop button
- Easy access to the power connection

#### › Control System

- Automatic control module
- SMP5 static battery charger
- Relays and fuses
- Emergency stop button

#### › Alimar Intellite AMF 25 Specifications

##### Event and Performance Log + RTC

- Flexible event based history with up to 119 events
- Reason, Running Hours + all important values are stored

##### User Interface

- Graphic 128 x 64 pixels display
- Wide range of languages in package

##### EFI Engine Support

- Engine specific J 1939 for all major manufacturers

##### Miscellaneous Features

- Fuel theft protection
- Alternative configuration (50Hz/60Hz)

##### SMS/E-mails

- SMS commands
- E-mails
- Alarm and event SMS

##### Communication Interfaces

- Optional RS232, RS485 (including Modem support) or USB plug-in interface
- Modbus RTU/TCP (requires RS485 interface/IB-Lite)
- Optional Internet/Ethernet via IB-Lite
- On-line control and monitoring over web pages (embedded web server) via IB-Lite
- Optional GSM modem/wireless Internet via IL-NT
- GPRS

#### › Optional Equipment

##### Engine

- Fuel - water separator filter
- Oil heater
- Remote radiator

##### Alternator

- Anti-condensation heater
- Main line circuit breaker

##### Control System

- Automatic synchronizing and power control system (multi gen-set parallel)
- Parallel system with mains
- Automatic or manual fuel filling system

##### Other Accessories

- Electrical oil drain pump
- Residential silencer
- Trailer
- Main fuel tank
- Automatic transfer switch
- Seismic isolator
- Coolant level

#### › Quality Certificates

- TSE CERTIFICATE
- AFTER-SALES QUALIFICATION CERTIFICATE
- INDUSTRIAL REGISTRY
- ISO 9001:2008
- ISO 14001:2004
- ISO 8528
- ISO 9046
- IEC 60034
- OHSAS 18001
- BRAND REGISTRY
- BS4999/5000
- VDE 0530





## ALMCU SERIES 28-3000 kVA



### DIESEL GENERATOR TECHNICAL SPECIFICATIONS DIESEL GENERATOR SET - 50 Hz 1500rpm 400/230V

#### Group

| Model        |         | ALMCU28 | ALMCU38 | ALMCU44 | ALMCU55 | ALMCU66 | ALMCU110 | ALMCU150 | ALMCU175 |
|--------------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| Power ESP    | kWe/kVA | 22/28   | 30/38   | 35,2/44 | 44/55   | 52,8/66 | 88/110   | 120/150  | 140/175  |
| Power PRP    | kWe/kVA | 20/25   | 27/35   | 32/40   | 40/50   | 48/60   | 80/100   | 108/135  | 128/160  |
| Power Factor | cosφ    | 0,8     | 0,8     | 0,8     | 0,8     | 0,8     | 0,8      | 0,8      | 0,8      |

#### Diesel Engine (4 Stroke - Cycle Water Cooled)

| Manufacturer             | CUMMINS |            |            |            |            |            |            |            |            |
|--------------------------|---------|------------|------------|------------|------------|------------|------------|------------|------------|
| Model                    |         | X2.5G2     | X3.3G1     | S3.8G4     | S3.8G6     | S3.8G7     | 6BTA5.9G5  | 6BTA5.9G6  | 6BTA5.9G7  |
| Gross Engine Power       | kWm     | 27         | 36         | 43         | 53         | 65         | 102        | 145        | 160        |
| Cylinder Arrangement     |         | 3L         | 4L         | 4L         | 4L         | 4L         | 6L         | 6L         | 6L         |
| Displacement             | lt      | 2,5        | 3,3        | 3,8        | 3,8        | 3,8        | 5,9        | 5,9        | 5,9        |
| Bore x Stroke            | mm      | 91,4x127   | 91,4x127   | 97x128     | 97x128     | 97x128     | 102x120    | 102x120    | 102x120    |
| Compression Ratio        |         | 18,5:1     | 18,5:1     | 17,5:1     | 17,5:1     | 17,5:1     | 17,6:1     | 16,5:1     | 16,5:1     |
| Aspiration*              |         | NA         | NA         | TC         | TC         | TC, AC     | TC, AC     | TC, AC     | TC, AC     |
| Governor Type            |         | Mechanical | Mechanical | Mechanical | Mechanical | Mechanical | Electronic | Electronic | Electronic |
| Starting Voltage         | VDC     | 12         | 12         | 12         | 12         | 12         | 12         | 12         | 12         |
| Lubricating Oil Capacity | lt      | 6,5        | 6,5        | 11         | 11         | 11         | 16,4       | 16,4       | 16,4       |
| Total Coolant Capacity   | lt      | 5,5        | 8,6        | 11         | 11         | 11         | 19,75      | 21,4       | 21,4       |

#### Fuel Consumption

|          |       |       |     |       |       |     |       |       |     |
|----------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| %100 PRP | g/kWh | 206,8 | 223 | 214,8 | 220,7 | 207 | 225,8 | 218,8 | 214 |
|----------|-------|-------|-----|-------|-------|-----|-------|-------|-----|

#### AC Generator

|                    |  |                         |
|--------------------|--|-------------------------|
| Phase/Pole         |  | 3/4                     |
| Control System     |  | Self Excited, Brushless |
| Voltage Regulator  |  | A,V,R, (Electronic)     |
| Voltage Regulation |  | ±%1                     |
| Insulation         |  | Class H                 |
| Protection         |  | IP23                    |
| Winding Connection |  | Star                    |
| Winding Pitch      |  | 2/3                     |
| Bearing            |  | Single                  |

#### Dimensions

| Overall Dimensions (Without Canopy) |    |      |       |       |      |      |      |       |       |
|-------------------------------------|----|------|-------|-------|------|------|------|-------|-------|
| Width                               | mm | 900  | 900   | 900   | 900  | 900  | 900  | 900   | 900   |
| Length                              | mm | 1500 | 1700  | 1700  | 1850 | 1850 | 2050 | 2400  | 2400  |
| Height                              | mm | 1280 | 1280  | 1380  | 1380 | 1380 | 1580 | 1650  | 1650  |
| Weight (dry)                        | kg | 680  | 790   | 918   | 1040 | 1090 | 1297 | 1370  | 1400  |
| Fuel Tank Capacity                  | lt | 88,2 | 107,8 | 107,8 | 145  | 145  | 190  | 268,8 | 268,8 |
| Overall Dimensions (With Canopy)    |    |      |       |       |      |      |      |       |       |
| Width                               | mm | 1000 | 1000  | 1000  | 1100 | 1100 | 1100 | 1100  | 1100  |
| Length                              | mm | 2200 | 2400  | 2400  | 2650 | 2650 | 2850 | 3300  | 3300  |
| Height                              | mm | 1530 | 1530  | 1530  | 1680 | 1680 | 1680 | 1880  | 1880  |
| Weight (dry)                        | kg | 790  | 1260  | 1390  | 1675 | 1725 | 1990 | 2220  | 2250  |
| Fuel Tank Capacity                  | lt | 54,6 | 107,8 | 107,8 | 145  | 145  | 190  | 268,8 | 268,8 |



**ALMCU SERIES**  
28-3000 kVA

**DIESEL GENERATOR TECHNICAL SPECIFICATIONS**  
**DIESEL GENERATOR SET - 50 Hz 1500rpm 400/230V**

**Group**

| Model        |         | ALMCU200 | ALMCU220 | ALMCU330 | ALMCU400 | ALMCU500 | ALMCU550 | ALMCU700 | ALMCU900 |
|--------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|
| Power ESP    | kWe/kVA | 160/200  | 176/220  | 264/330  | 320/400  | 400/500  | 440/550  | 560/700  | 720/900  |
| Power PRP    | kWe/kVA | 145/180  | 160/200  | 240/300  | 291/365  | 364/455  | 400/500  | 508/635  | 645/810  |
| Power Factor | cosφ    | 0,8      | 0,8      | 0,8      | 0,8      | 0,8      | 0,8      | 0,8      | 0,8      |

**Diesel Engine (4 Stroke - Cycle Water Cooled)**

| Manufacturer             | CUMMINS |            |            |            |            |            |            |            |            |
|--------------------------|---------|------------|------------|------------|------------|------------|------------|------------|------------|
| Model                    |         | 6CTA8.3G2  | 6CTAA8.3G3 | QSL9G5     | NTA855G4   | QSX15G6    | QSX15G8    | VTA28G5    | QSK23G3    |
| Gross Engine Power       | kWm     | 180        | 203        | 310        | 351        | 459        | 500        | 615        | 768        |
| Cylinder Arrangement     |         | 6L         | 6L         | 6L         | 6L         | 6L         | 6L         | 12V        | 6L         |
| Displacement             | lt      | 8.3        | 8.3        | 8.8        | 14         | 15         | 15         | 28         | 23.15      |
| Bore x Stroke            | mm      | 114x135    | 114x135    | 114x145    | 140x152    | 137x169    | 137x169    | 140x152    | 170x170    |
| Compression Ratio        |         | 16,8:1     | 16,8:1     | 16,5:1     | 14,0:1     | 17,0:1     | 17,0:1     | 13,1:1     | 16,0:1     |
| Aspiration*              |         | TC, AC     | TC, AC     | TC, AC     | TC, AC     | TC, IC     | TC, AC     | TC, AC     | TC, AC     |
| Governor Type            |         | Electronic | Electronic | Electronic | Electronic | Electronic | Electronic | Electronic | Electronic |
| Starting Voltage         | VDC     | 24         | 24         | 24         | 24         | 24         | 24         | 24         | 24         |
| Lubricating Oil Capacity | lt      | 23.8       | 23.8       | 26.5       | 38.6       | 91         | 91         | 83         | 103        |
| Total Coolant Capacity   | lt      | 26         | 24         | 32         | 45         | 42         | 42         | 80         | 46.5       |

**Fuel Consumption**

|          |       |     |     |     |     |     |     |     |     |
|----------|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| %100 PRP | g/kWh | 206 | 211 | 197 | 201 | 195 | 195 | 210 | 193 |
|----------|-------|-----|-----|-----|-----|-----|-----|-----|-----|

**AC Generator**

|                    |  |                         |
|--------------------|--|-------------------------|
| Phase/Pole         |  | 3/4                     |
| Control System     |  | Self Excited, Brushless |
| Voltage Regulator  |  | A,V,R, (Electronic)     |
| Voltage Regulation |  | ±%1                     |
| Insulation         |  | Class H                 |
| Protection         |  | IP23                    |
| Winding Connection |  | Star                    |
| Winding Pitch      |  | 2/3                     |
| Bearing            |  | Single                  |

**Dimensions**

| Overall Dimensions (Without Canopy) |    |      |      |      |       |      |      |      |         |
|-------------------------------------|----|------|------|------|-------|------|------|------|---------|
| Width                               | mm | 900  | 900  | 1100 | 1100  | 1350 | 1350 | 1700 | 1700    |
| Length                              | mm | 2600 | 2600 | 2950 | 3350  | 3300 | 3600 | 3900 | 3900    |
| Height                              | mm | 1650 | 1650 | 1833 | 1950  | 2100 | 2100 | 2400 | 2400    |
| Weight (dry)                        | kg | 1620 | 1620 | 2400 | 3100  | 3650 | 3650 | 5250 | 6680    |
| Fuel Tank Capacity                  | lt | 291  | 291  | 255  | 344   | 670  | 670  | 890  | 1500(H) |
| Overall Dimensions (With Canopy)    |    |      |      |      |       |      |      |      |         |
| Width                               | mm | 1100 | 1100 | 1250 | 1250  | 1600 | 1600 | 2000 | 2000    |
| Length                              | mm | 3400 | 3400 | 3700 | 4250  | 4200 | 4200 | 4450 | 4450    |
| Height                              | mm | 1880 | 1880 | 2070 | 2110  | 2310 | 2310 | 2610 | 2610    |
| Weight (dry)                        | kg | 2470 | 2470 | 3630 | 4300  | 5090 | 5090 | 6050 | 8200    |
| Fuel Tank Capacity                  | lt | 291  | 291  | 323  | 408.5 | 823  | 823  | 1065 | 1065    |



## ALMCU SERIES 28-3000 kVA



### DIESEL GENERATOR TECHNICAL SPECIFICATIONS DIESEL GENERATOR SET - 50 Hz 1500rpm 400/230V

#### Group

| Model        |         | ALMCU1000 | ALMCU1100 | ALMCU1400 | ALMCU1650 | ALMCU2000 | ALMCU2250 | ALMCU2500 | ALMCU3000 |
|--------------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Power ESP    | kWe/kVA | 800/1000  | 880/1100  | 1120/1400 | 1320/1650 | 1600/2000 | 1800/2250 | 2000/2500 | 2400/3000 |
| Power PRP    | kWe/kVA | 728/910   | 800/1000  | 1020/1275 | 1120/1400 | 1500/1875 | 1600/2045 | 1600/2000 | 2200/2750 |
| Power Factor | cosφ    | 0.8       | 0.8       | 0.8       | 0.8       | 0.8       | 0.8       | 0.8       | 0.8       |

#### Diesel Engine (4 Stroke - Cycle Water Cooled)

| Manufacturer             | CUMMINS |            |            |              |              |            |            |            |            |
|--------------------------|---------|------------|------------|--------------|--------------|------------|------------|------------|------------|
| Model                    |         | KTA38G3    | KTA38G5    | KTAS0G3      | KTAS0G8      | QSK60G3    | QSK60G4    | QSK60G13   | QSK78G9    |
| Gross Engine Power       | kWm     | 895        | 970        | 1227         | 1429         | 1790       | 1915       | 2164       | 2539       |
| Cylinder Arrangement     |         | 12V        | 12V        | 16V          | 16V          | 16V        | 16V        | 16V        | 18V        |
| Displacement             | lt      | 38         | 38         | 50           | 50           | 60.2       | 60.2       | 60.2       | 77.6       |
| Bore x Stroke            | mm      | 159x159    | 159x159    | 158,8x1598,8 | 158,8x1598,8 | 159x190    | 159x190    | 159 x 190  | 170x190    |
| Compression Ratio        |         | 13,9:1     | 13,9:1     | 13,9:1       | 14,9:1       | 14,5:1     | 14,5:1     | 14,5:1     | 15,5:1     |
| Aspiration*              |         | TC, AC     | TC, AC     | TC, AC       | TC, AC       | TC, AC     | TC, AC     | TC, AC     | TC, AC     |
| Governor Type            |         | Electronic | Electronic | Electronic   | Electronic   | Electronic | Electronic | Electronic | Electronic |
| Starting Voltage         | VDC     | 24         | 24         | 24           | 24           | 24         | 24         | 24         | 24         |
| Lubricating Oil Capacity | lt      | 140        | 140        | 177          | 204          | 280        | 280        | 280        | 465        |
| Total Coolant Capacity   | lt      | 218.5      | 218.5      | 161          | 240          | 242        | 242        | 193        | 340        |

#### Fuel Consumption

|          |       |     |       |     |     |     |     |     |       |
|----------|-------|-----|-------|-----|-----|-----|-----|-----|-------|
| %100 PRP | g/kWh | 206 | 199,5 | 200 | 202 | 193 | 191 | 194 | 192,5 |
|----------|-------|-----|-------|-----|-----|-----|-----|-----|-------|

#### AC Generator

|                    |  |                         |
|--------------------|--|-------------------------|
| Phase/Pole         |  | 3/4                     |
| Control System     |  | Self Excited, Brushless |
| Voltage Regulator  |  | A,V,R, (Electronic)     |
| Voltage Regulation |  | ±%1                     |
| Insulation         |  | Class H                 |
| Protection         |  | IP23                    |
| Winding Connection |  | Star                    |
| Winding Pitch      |  | 2/3                     |
| Bearing            |  | Single                  |

#### Dimensions

##### Overall Dimensions (Without Canopy)

|                    |    |         |         |         |         |         |         |         |         |
|--------------------|----|---------|---------|---------|---------|---------|---------|---------|---------|
| Width              | mm | 1750    | 1750    | 2000    | 2050    | 2500    | 2500    | 2700    | 2700    |
| Length             | mm | 4750    | 4600    | 5000    | 5750    | 6800    | 6850    | 7250    | 7250    |
| Height             | mm | 2504    | 2429    | 2500    | 2400    | 3700    | 3700    | 3700    | 3700    |
| Weight (dry)       | kg | 7640    | 7640    | 10800   | 11040   | 14000   | 16300   | 16500   | 25160   |
| Fuel Tank Capacity | lt | 1500(H) | 2000(H) | 2000(H) | 2500(H) | 3000(H) | 3335(H) | 3335(H) | 3335(H) |

##### Overall Dimensions (With Canopy)

|                    |    |         |         |         |         |         |         |         |         |
|--------------------|----|---------|---------|---------|---------|---------|---------|---------|---------|
| Width              | mm | 2000    | 2000    | 2450    | 2450    | 2800    | 2800    | 3000    | 3000    |
| Length             | mm | 5300    | 4800    | 6058    | 6500    | 7550    | 7650    | 8000    | 8000    |
| Height             | mm | 2610    | 2610    | 2800    | 2800    | 3800    | 3800    | 3800    | 3800    |
| Weight (dry)       | kg | 9200    | 9200    | 12500   | 14800   | 16200   | 20100   | 22000   | 28900   |
| Fuel Tank Capacity | lt | 1500(H) | 2000(H) | 2000(H) | 2500(H) | 3000(H) | 3335(H) | 3335(H) | 4500(H) |

\*TC: Turbocharged, IC: Intercooler, AC: Aftercooler, NA: Natural Aspiration

**Stand-by:** Code: ESP

Applicable for supplying emergency power at varying load in the event of the normal utility power interruption.  
Overload: Not allowed

**Prime:** Code: PRP

Applicable for supplying emergency power at varying load in the event of the normal utility power interruption.  
Overload: %10 allowed

ALIMAR reserves the right to modify any characteristic without prior notice.  
Dimensions based on products standart. Illustrations may include equipments.  
Technical data described here correspond with the available information at the moment of printing.  
Industrial design under patent.

**alimar**  
GENERATOR

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