

ENERMAX SERIES

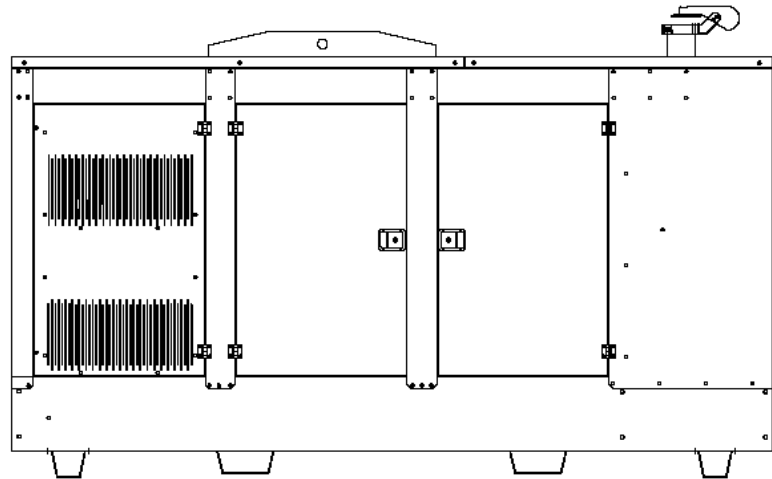
DIESEL GENERATOR
GROUPE ELECTROGENE DIESEL
GRUPO ELECTROGENO DIESEL
GRUPPO ELETTOGENO DIESEL

MODEL
 MODELE
 MODELO
 MODELLO

VO 352 TSX*



SOUNDPROOF VERSION



| GENERATING SET PERFORMANCE PERFORMANCES DU GROUPE PRESTACIONES DEL GRUPO PRESTAZIONI DEL GRUPPO | | 50 Hz | 60 Hz |
|--|-------|-------------|-------------|
| Voltage Voltage Voltaje Tensione | | V 400 / 230 | V 220 / 127 |
| Continuous Power Puissance service continue Potencia servicio continuo Potenza servizio continuo | PRP | kVA 315 | kVA 335 |
| Stand-by Power Puissance service secours Potencia servicio emergencia Potenza servizio in emergenza | LTP | kVA 341 | kVA 369 |
| Continuous Power Puissance service continue Potencia servicio continuo Potenza servizio continuo | PRP | kWe 252 | kWe 268 |
| Stand-by Power Puissance service secours Potencia servicio emergencia Potenza servizio in emergenza | LTP | kWe 273 | kWe 295 |
| Power factor Facteur de puissance Factor de potencia Fattore di potenza | cos φ | 0,8 | 0,8 |
| Fuel consumption Consommation combustible Consumo de combustible Consumo combustibile | 70 % | l/h 43,8 | l/h 48,3 |

| ENGINE MOTEUR MOTOR MOTORE | VOLVO PENTA | | TAD 1341 GE | | |
|---|--------------------|-----------|---|-----------------|---|
| PERFORMANCE PERFORMANCES PRESTACIONES PRESTAZIONI | 1500 rpm | | 1800 rpm | | |
| Continuous Power Puissance service continue Potencia servicio continuo Potenza servizio continuo | PRP | kWm | 271 | kWm | 287 |
| Stand-by Power Puissance service secours Potencia servicio emergencia Potenza servizio in emergenza | LTP | kWm | 298 | kWm | 317 |
| Specific fuel consumption Consommation spécifique combustible Consumo específico de combustible Consumo specifico combustibile | | g/kWh | 25 % 230 50 % 202 75 % 195 100 % 191 | g/kWh | 25 % 237 50 % 211 75 % 202 100 % 200 |
| Diesel 4 Stroke – Injection type Diesel 4 temps – Type injection Diesel 4 tiempos – Tipo de inyección Diesel a 4 tempi – Tipo di iniezione | | | | | Direct Directe Directa Diretta |
| Aspiration type Type d'aspiration Tipo de aspiracion Tipo d'aspirazione | | | | | Turbocharged Suralimentée Sobrealimentado Sovralimentata |
| Cooling system Refroidissement Sistema de refrigeración Raffreddamento | | | | | Water Eau Agua Acqua |
| Speed governor Régulateur de tours Regulador Regolatore di giri | | | | | Electronic Électronique Eléctronico Elettronico |
| Cylinders, numbers and arrangement Nombre et disposition des cylindres Cilindros, numero y disposición Numero e disposizione dei cilindri | | | | | 6 L |
| Total displacement Cylindrée totale Cilindrata total Cilindrata totale | | | | cm ³ | 12.780 |
| Bore x stroke Alésage x course Diámetro x carrera Alesaggio x corsa | | | | mm | 131 x 158 |
| Compression ratio Rapport de compression Relación de compresión Rapporto di compressione | | | | | 18.1:1 |
| Engine electric system voltage Voltage système électrique moteur Voltaje sistema eléctrico motor Voltaggio sistema elettrico motore | | | | | 24 V |
| Derating for temperature Déclassement pour temperature Declasamiento para temperatura Declassamento per temperatura | | | | | NO DERATING |
| Derating for altitude Déclassement pour altitude Declasamiento para altitud Declassamento per altitudine | | 0÷3600 mt | 0 | 0÷3000 mt | 0 |
| | | >3600 mt | 4,5% / 500 mt | >3000 mt | 9% / 500 mt |
| Derating for relative humidity Déclassement pour humidité relative Declasamiento para humedad relativa Declassamento per umidità relativa | | | | | NO DERATING |

| ALTERNATOR ALTERNATEUR ALTERNADOR ALTERNATORE | | MECCALTE | | | | |
|---|--|---|------------------------|----------------------------|---------------|----------------------------|
| PERFORMANCE PERFORMANCES PRESTACIONES PRESTAZIONI | | 1500 rpm | | 1800 rpm | | |
| Model Modèle Modelo Modello | | ECO38-3LN/4 | | ECO38-2LN/4 | | |
| Continuous Power Puissance service continue Potencia servicio continuo Potenza servizio continuo | | 40 °C | kVA kWe | 350 280 | kVA kWe | 340 272 |
| Stand-by Power Puissance service secours Potencia servicio emergencia Potenza servizio in emergenza | | 40 °C | KVA kWe | 360 288 | KVA kWe | 378 302,4 |
| Stand-by Power Puissance service secours Potencia servicio emergencia Potenza servizio in emergenza | | 27 °C | KVA kWe | 370 296 | KVA kWe | 396 316,8 |
| Efficiency Rendement Eficienza Efficienza | | | 2/4 3/4 4/4 | 92,6 % 93,7 % 93,5 % | | 93,9 % 95,1 % 94,7 % |
| Standard winding connections Liaison des bobinages Tipo de conexión Collegamento avvolgimenti | | | | Y | | YY |
| Exciter Excitatrice Excitador Excitatrice | | brushless rotating exciter design with solid state pivotante sans brosses avec pont de diodes pivotants puente de diodos sin escobillas rotantes rotante senza spazzole con ponte di diodi rotanti | | | | |
| Poles Poles Polos Poli | | | | | | 4 |
| Phases Phases Fases Fasi | | | | | | 3 + N |
| Wires Fils Hilos Morsetti | | | | | | 12 |
| Voltage regulation Regulation Voltage Regulación voltaje Regolazione tensione | | | | | | ± 1% |
| Insulation class Classe d' isolation Classe de aislamiento Classe di isolamento | | | | | | H |
| Enclosure Degré de protection mécanique Grado de protección mecánica Grado di protezione meccanica | | | | | | IP 21 |
| Air Volume Volume d'air Volumen de aire Volume d'aria | | 50 Hz | 32 m ³ /min | | 60 Hz | 39 m ³ /min |
| Standard AVR model Modèle AVR standard Modelo AVR standard Modello AVR standard | | | | | | DSR |
| Derating for temperature Déclassement pour température Declasamiento para temperatura Declasseamento per temperatura | | 0 ÷ 40°C | 0 | | > 40 °C | 3 % / 5°C |
| Derating for altitude Déclassement pour altitude Declasamiento para altitud Declasseamento per altitudine | | 0 ÷ 1000 m | 0 | | 1000 ÷ 2500 m | 3% / 500 m |
| | | 2500 ÷ 3000 m | 4% / 500 m | | | |

LOGISTIC INFORMATION
INFORMATIONS LOGISTIQUES
INFORMAZIONI LOGISTICHE
INFORMAZIONI LOGISTICHE

| | | | | | | |
|--|---|------------|---------------------------------|---|--------|-----|
| | Integrated fuel tank capacity Capacité réservoir intégré Capacidad Tanque integrado Capacità Serbatoio integrato | | Weight Poids Peso Peso | Dimensions Cotes d'encombrement Medidas externas Dimensioni d'ingombro | | |
| | (L) | | | (kg) | (cm) | |
| | STD | EXTRA 1 | L | | W | H |
| SOUND PROOF VERSION VERSION INSONORISEE VERSION INSONORISADA VERSIONE INSONORIZZATA | 1000 | ON REQUEST | 3860 | 425 | 200 | 252 |


GENSET STANDARD EQUIPMENT
EQUIPEMENT STANDARD GROUPE ELECTROGENE
EQUIPAMIENTO STANDARD GRUPO ELECTROGENO
EQUIPAGGIAMENTO STANDARD GRUPPO ELETTROGENO

| GB | F | E | I |
|---|---|---|---|
| <ul style="list-style-type: none"> Lifting eye Vibration dampers Integrated bunded fuel tank Battery Manual autostart control panel With DSE7310 Emergency stop button Sound proof canopy of galvanized steel with residential silencer Fork lift guides | <ul style="list-style-type: none"> Crochet de levage Amortisseurs de vibrations Réservoir intégré avec bac de rétention Batterie Coffret de contrôle manuel autostart avec DSE7310 Bouton arrêt d'urgence Capote d'insonorisation d'acier galvanisé avec silencieux résidentiel Supports pour fourches | <ul style="list-style-type: none"> Gancho central Apagadores de vibracion Tanque combustible integrado con bandeja para la recogida de líquidos Bateria Cuadro manual autostart con DSE7310 Botón parada de emergencia Cabina de insonorización de acero cincado con silenciador residencial Supportes para carretilla | <ul style="list-style-type: none"> Gancio centrale di sollevamento Antivibranti Serbatoio integrato con vasca di raccolta liquidi Batteria Quadro manuale autostart con DSE7310 Pulsante arresto di emergenza Cabina di insonorizzazione di acciaio zincato con marmitta residenziale Porta forche |

MANUAL AUTOSTART CONTROL PANEL
COFFRET ELECTRIQUE MANUEL AUTOSTART
CUADRO ELECTRICO MANUAL AUTOSTART
QUADRO ELETTRICO MANUALE AUTOSTART

ACP 7310 AUS
630 A (400 V - 3 ph - 50Hz - 1500 rpm)
1000 A (220 V - 3 ph - 60Hz - 1800 rpm)

| | | | |
|---|---|---|---|
| STANDARD EQUIPMENT: 4 poles circuit breaker Electronic control board DSE 7310 Control panel box key Emergency Stop button | EQUIPEMENT STANDARD: Disjoncteur de protection 4 pôles Fiche électronique DSE 7310 Clé pour serrure du coffret Interrupteur d'arrêt d'urgence | EQUIPAMIENTO STANDARD: Interruptor magnetotermico 4 polos Carta electronica DSE 7310 Llave cuadro Botón de parada de emergencia | EQUIPAGGIAMENTO STANDARD: Interruttore magnetotermico 4 poli Scheda elettronica DSE 7310 Chiave quadro Pulsante di arresto di emergenza |
|---|---|---|---|

| | | |
|---|-----------------|---|
|  | DSE 7310 | CONTROL BOARD CARTE ELECTRONIQUE DE CONTROL CARTA ELECTRONICA DE CONTROL SCHEDA ELETTRONICA DI CONTROLLO |
|---|-----------------|---|

| PROTECTIONS | PROTECTIONS | PROTECCIONES | PROTEZIONI |
|---|--|---|---|
| Low oil pressure High engine temperature Low fuel level Fail to start Fail to stop Emergency stop Over/under generator frequency Over/under generator voltage Over/under speed Fuel level Belt breakage Over current Over/under battery voltage | Basse pression huile moteur Haute température moteur Basse niveau combustible Non démarrage Non arrêt Arrêt d'urgence Sur/sous générateur fréquence Sur/sous générateur voltage Sur/sourvitesse Niveau de combustible Rupture courroie Surcourant Sur/sus la tension de batterie | Baja presión aceite Elevada temperatura motor Baja nivel carburante Falta de arranque Falta de parada Parada de emergencia Sobre/bajo generatore frecuencia Sobre/bajo generatore voltaje Sobre/bajo velocidad nivel de combustible Ruptura correa Corriente maxima Sobre/bajo voltaje de la batería | Bassa pressione olio Alta temperatura motore Basso livello di carburante Mancato avviamento Mancato arresto Stop d'emergenza Sovra/sotto frequenza generatore Sovra/sotto voltaggio generatore Sovra/sotto velocità Livello del carburante Rottura cinghia Sovraccorrente Sovra/sotto tensione della batteria |
| DIGITAL METERS | VOYANT NUMERIQUE POUR | VISOR DIGITAL PARA | MISURATORE DIGITALE PER |
| Generator volts (3 phases) Generator amperes (3 phases) Generator frequency KW-meter kVA-meter Cos φ- meter Rpm meter Gen set hours counter Battery Volts | Voltmètre générateur (3 phases) Ampèremètre générateur (3 phases) Fréquencemètre générateur KW-mètre kVA- mètre Cos φ- mètre Tm mètre Totalisateur d'heures de marche Voltmètre batterie | Voltimetro (3 fases) Amperimetro (3 fases) Frecuencimetro KW- metro kVA- metro Cos φ-metro Revoluciones por minuto metro Medida horas de marcha Voltmetro batería | Volmetro tensione generatore (3 fasi) Amperometro generatore (3 fasi) Frequenzimetro generatore KW- metro kVA- metro Cos φ-metro Gm metro Contaore di funzionamento gruppo Voltmetro batteria |

**AUTOMATIC CONTROL PANEL
COFFRET ELECTRIQUE AUTOMATIQUE
CUADRO ELECTRICO AUTOMATICO
QUADRO ELETTRICO AUTOMATICO**

| | |
|---|--|
| <p>1) ACP 7320 ATS</p>  | <p>COMPLETE CONTROL PANEL FREE STANDING TYPE Equipment: control board, circuit breaker, battery charger, transfer switch, box key. COFFRET ELECTRIQUE COMPLET TYPE ARMOIRE SEPRE DU GROUPE Equipement : carte électronique de contrôle, disjoncteur de protection, chargeur de batterie, inverseur de source, clé coffret. CUADRO ELECTRICO COMPLETO EN ARMARIO SEPARADO DEL GRUPO Equipamiento: carta electronica de controllo, interruptor magnetotermico, cargador de bateria, transferencial, llave quadro. QUADRO ELETTRICO COMPLETO SEPARATO DAL GRUPPO Equipaggiamento: scheda elettronica di controllo, interruttore magnetotermico, carica batteria, telecommutazione e chiave quadro.</p> |
| <p>2) ACP 7320 AMF</p>  | <p>AMF CONTROL PANEL FITTED ON THE GEN-SET WITHOUT TRANSFER SWITCH Equipment: control board, circuit breaker, battery charger, box key. COFFRET ELECTRIQUE MONTE SUR LE GROUPE SANS INVERSEUR DE SOURCE Equipement : carte électronique de contrôle, disjoncteur de protection, chargeur de batterie, clé coffret. CUADRO ELECTRICO MONTADO SOBRE EL GRUPO SIN TRANSFERENCIAL Equipamiento: carta electronica de controllo, interruptor magnetotermico, cargador de bateria, llave quadro. QUADRO ELETTRICO MONTATO SUL GRUPPO ELETTROGENO SENZA TELECOMMUTAZIONE Equipaggiamento: scheda elettronica di controllo, interruttore magnetotermico, carica batteria, chiave quadro.</p> |
| <p>3) ACP 7320 STS</p>  | <p>CONTROL PANEL FITTED ON THE GEN-SET WITH TRANSFER SWITCH SUPPLIED IN A SEPARATED BOX Equipment: control board, circuit breaker, battery charger, box key, separate transfer switch. COFFRET ELECTRIQUE MONTE SUR LE GROUPE + INVERSEUR DE SOURCE FOURNI DANS UN COFFRET SEPRE Equipement : carte électronique de contrôle, disjoncteur de protection, chargeur de batterie, inverseur de source séparé, clé coffret. CUADRO ELECTRICO MONTADO SOBRE EL GRUPO CON TRANSFERENCIAL SEPARADO Equipamiento: carta electronica de controllo, interruptor magnetotermico, cargador de bateria, llave quadro, transferencial separado. QUADRO ELETTRICO MONTATO SUL GRUPPO ELETTROGENO CON TELECOMMUTAZIONE SEPARATA Equipaggiamento: scheda elettronica di controllo, interruttore magnetotermico, carica batteria, chiave quadro, telecommutazione in armadio separato.</p> |

**CONTROL BOARD
CARTE ELECTRONIQUE DE CONTROL
CARTA ELECTRONICA DE CONTROL
SCHEDA ELETTRONICA DI CONTROLLO**

| GB | F | E | I |
|---|---|---|--|
| <p>The DSE7320 is an Automatic Mains Failure Control Module designed to automatically start and stop diesel generating sets that include electronic and non electronic engines. The module also provides excellent genset monitoring and protection features.</p> | <p>La DSE7320 est une carte de contrôle projetée pour démarrer et arrêter automatiquement groupes électrogènes diesels avec moteurs électroniques et non électroniques. La carte représente un système excellent de contrôle et de protection du groupe électrogène.</p> | <p>La DSE7320 es una carta de control para arrancar y parar automáticamente grupos electrogenos diesel con motores electrónicos y no electrónicos. La carta constituye un excelente sistema de control y protección del grupo electrogeno.</p> | <p>La DSE7320 è una scheda di controllo progettata per avviare e arrestare automaticamente gruppi elettrogeni diesel con motori elettronici e non elettronici. La scheda costituisce un eccellente sistema di controllo e di protezione del gruppo elettrogeno.</p> |
| FEATURES | EQUIPEMENT | EQUIPMENT | EQUIPAGGIAMENTO |
| <p>Stop/reste – Auto – Manual – Start LCD display scroll Event log view Acoustic alarm</p> | <p>Fiche électronique de contrôle DSE7320 Disjoncteur de protection Chargeur de batterie Bouton poussoir arrête d'urgence</p> | <p>Ficha electrónica de control DSE7320 Interruptor magnetotermico Cargador de batería Boton de parada de emergencia</p> | <p>Scheda elettronica di controllo DSE7320 Interruttore magnetotermico Carica batteria Pulsante stop emergenza</p> |
| DIGITAL MEASURING | MESURES NUMERIQUES | MEDIDAS DIGITALES | MISURAZIONI DIGITALI |
| <p>Generator volts (3 phases) Generator amperes (3 phases) Generator frequency KW-meter kVA-meter Cos φ- meter Rpm meter Water temperature (optional) Oil pressure (optional) Gen set hours counter Mains volts Battery volts Mains frequency Charging voltage Start-counter Fuel level %</p> | <p>Voltmètre générateur (3 phases) Ampèremètre générateur (3 phases) Fréquencemètre générateur KW- mètre kVA- mètre Cos φ- mètre Tm mètre Température eau (facultatif) Pression huile (facultatif) Totalisateur d'heures de marche Voltmètre secteur Voltmètre batterie Fréquence réseau Tension de charge Compteur démarrages Niveau combustible %</p> | <p>Voltmetro (3 fases) Amperimetro (3 fases) Frecuencimetro KW- metro kVA- metro Cos φ- metro Revoluciones por minuto metro Termometro agua (opcional) Presión aceite (opcional) Medida horas de marcha Voltmetro tensión de red Voltmetro batería Frecuencia red Tensión de carga Numero de arranques Nivel carburante %</p> | <p>Voltmetro tensione generatore (3 fasi) Amperometro generatore (3 fasi) Frequenzimetro generatore KW- metro kVA- metro Cos φ- metro Gm metro Temperatura acqua (facoltativo) Pressione olio (facoltativo) Contaore di funzionamento gruppo Voltmetro tensione rete Voltmetro batteria Frequenza rete Tensione di carica Contavviamenti Livello carburante %</p> |
| INDICATORS | INDICATEURS | INDICADORES | INDICATORI |
| <p>Mains live Generator live Mains contactor closed Generator contactor closed Engine running</p> | <p>Présence secteur Présence tension générateur Inverseur secteur fermé Inverseur générateur fermé Moteur en marche</p> | <p>Presencia tensión de red Presencia tensión grupo Transferencial red cerrado Transferencial grupo cerrado Motor en marcha</p> | <p>Presenza tensione di rete Presenza tensione generatore Erogazione da rete Erogazione da gruppo Motore avviato</p> |
| PROTECTIONS | PROTECTIONS | PROTECCIONES | PROTEZIONI |
| <p>Low oil pressure High engine temperature Low fuel level Fail to start Fail to stop Emergency stop Over/under frequency Over/under voltage Over/under speed Fuel level Belt breakage Over current Over/under battery voltage</p> | <p>Bas pression huile moteur Haute température moteur Bas niveau combustible Non démarrage Non arrêt Arrêt d'urgence Sur/sous fréquence Sur/sous voltage Sur/sous vitesse Niveau de combustible Rupture courroie Surcourant Sur/sus la tension de batterie</p> | <p>Baja presión aceite Elevada temperatura motor Baja nivel carburante Falta de arranque Falta de parada Parada de emergencia Sobre/bajo frecuencia Sobre/bajo voltaje Sobre/bajo velocidad nivel de combustible Ruptura correa Corriente maxima Sobre/bajo voltaje de la batería</p> | <p>Bassa pressione olio Alta temperatura motore Basso livello di carburante Mancato avviamento Mancato arresto Stop d'emergenza Sovra/sotto frequenza Sovra/sotto voltaggio Sovra/sotto velocità Livello del carburante Rottura cinghia Sovraccorrente Sovra/sotto tensione della batteria</p> |

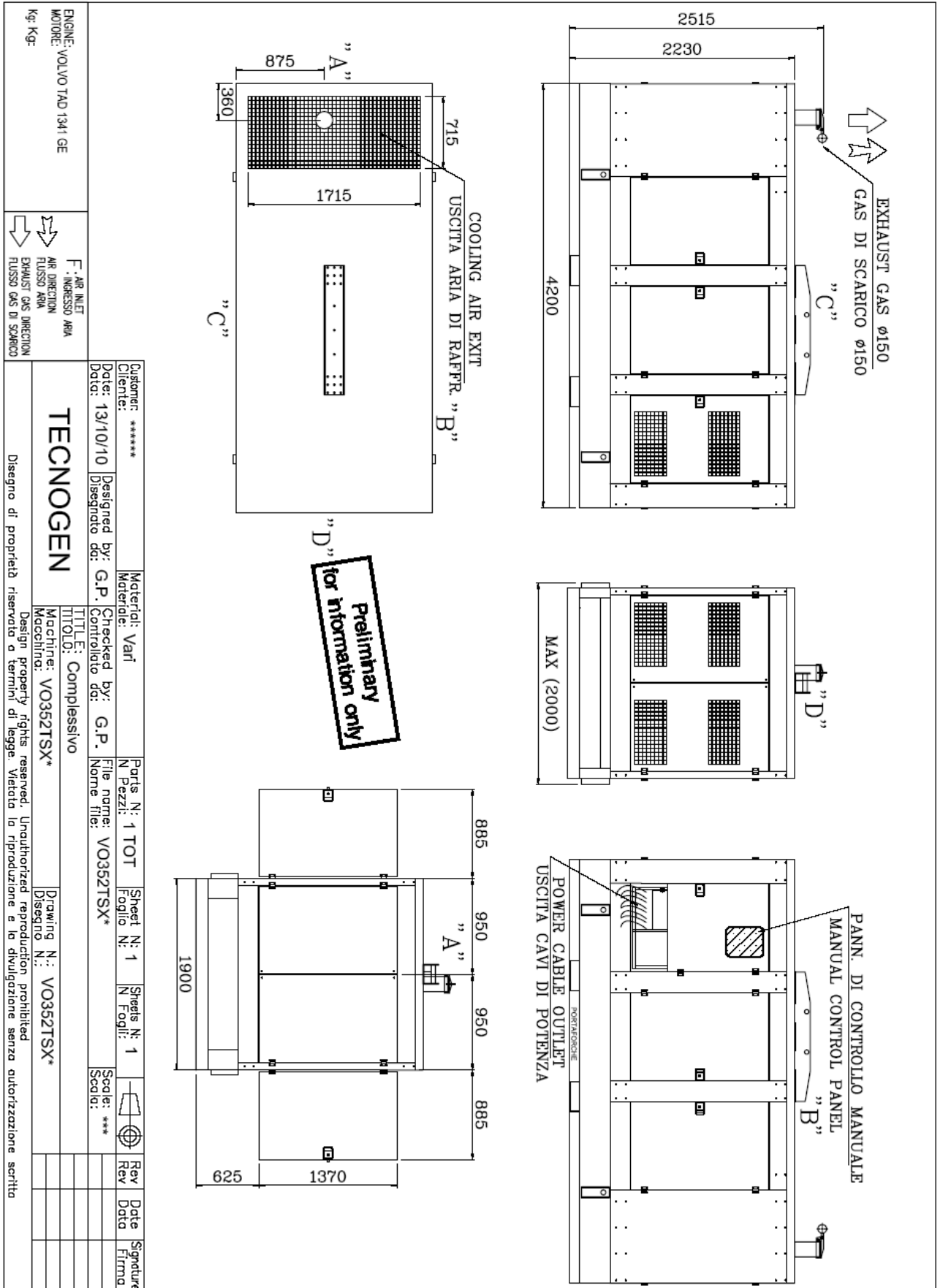
SOUNDPROOF CANOPY
CAPOTE D'INSONORISATION
CAPOTA DE INSONORIZACION
CABINA INSONORIZZATA

| GB | F | E | I |
|---|---|--|--|
| <p>The TecnoGen Super Silent soundproof canopy has been designed with the aim of achieving the maximum noise level reduction and to provide a perfect cooling of the engine. The cooling airflow is forced through fixed circuits. The canopy is suitable for tropical ambient application. The exhaust gas silencer is residential type internally mounted. The canopy is completely built of hot galvanized carbon sheet steel. The sheets have a thickness 20/10. The structure is fully bolted, fixed by a special polyethylene sealing, completely free from electrical installation. All the panels can be easily removed. The cab is provided with doors of wide opening for easy access to generating set for the maintenance operations. The soundproofing materials are highly fire resistant and self-extinguishing.</p> | <p>La capote insonorisée TecnoGen Super Silent à été conçue pour atteindre le niveau de bruit le mineur possible et un refroidissement du moteur parfait. Le souffle d'air refroidissant est canalisé en circuits fixes. La capote est apte à être utilisée dans les ambiances tropicales. Le silencieux des gaz d'échappement, de type résidentiel, est mis à l'intérieur de la capote. La cabine est construite en acier galvanisé à chaud. Les tôles ont une épaisseur de 20/10. La structure est complètement boulonnée et fixée à travers des garnitures spéciales au polyéthylène. Tous les panneaux sont facilement amovibles. La cabine est dotée de portes avec grandes ouvertures qui permettent un accès facile au groupe électrogène pour les opérations de manutention. Les matériaux d'insonorisation sont fortement résistant au feu et auto-extinguibles.</p> | <p>La capota insonorizada TecnoGen Super Silent tiene sido planeada con el objetivo de alcanzar el menor nivel de rumorosidad posible y un perfecto enfriamiento del motor. El soplo de aire es canalizado en circuitos fijos. La cabina es apta a ser utilizada en ambientes tropicales. El silenciador de los gases de descargue, de tipo residencial, es colocado dentro de la cabina. La cabina es construida en acero cincado. Las chapas tienen un espesor de 20/10. La estructura es completamente bullonata y montada con sellos especiales de polietilene. Todos los paneles son fácilmente removibles. La cabina es dotada con puertas con amplias aberturas que permiten el fácil acceso al grupo eléctrico por las operaciones de manutención. Los materiales insonorizantes son muy resistentes al fuego y auto-extinguentes.</p> | <p>La cabina insonorizzata TecnoGen Super Silent è stata progettata allo scopo di raggiungere il minor livello di rumorosità possibile e un perfetto raffreddamento del motore. Il soffio d'aria raffreddante è canalizzato in circuiti fissi. La cabina è adatta ad essere utilizzata in ambienti tropicali. Il silenziatore dei gas di scarico, di tipo residenziale, è collocato all'interno della cabina. La cabina è costruita in acciaio zincato a caldo. Le lamiere hanno uno spessore di 20/10. La struttura è completamente bullonata e fissata tramite speciali sigilli al polietilene. Tutti i pannelli sono facilmente rimovibili. La cabina è dotata di porte con ampie aperture che consentono il facile accesso al gruppo elettrogeno per le operazioni di manutenzione. I materiali insonorizzanti sono altamente resistenti al fuoco e autoestinguenti.</p> |

Our quality in 13 points
Notre qualité résumée en 13 points
Nuestra calidad en 13 puntos
La nostra qualità in 13 punti

| | | |
|----|--|---|
| 1 | | Internal residential silencer for lower sound levels Silencieux interne pour un niveau bas de bruit Silenciador interno para un nivel de rumorosidad más bajo Silenziatore interno per un livello di rumorosità più basso |
| 2 | | Integrated fuel tank of different sizes Réservoirs de combustible disponibles, sur demande, de capacité supérieure Tanques integrados disponibles, como opción, de capacidad superior Serbatoi integrati disponibili, su richiesta, di capacità superiore |
| 3 | | Control panel viewing window to easily check status of generating set Fenêtre de visualisation du panneau de contrôle pour un contrôle plus facile du status opérationnel du groupe Ventana de visualización del panel de control por un más fácil control del estatus operativo del grupo Finestra di visualizzazione del pannello di controllo per un più facile controllo dello status operativo del gruppo |
| 4 | | Lockable access doors for extra safety and security Porte d'accès avec serrure pour une sûreté majeure Puertas de acceso con cerradura para una mayor seguridad Porte di accesso con serratura per una maggiore sicurezza |
| 5 | | Galvanized bolts Boulons galvanisés Pernos cincados Bulloni zincati |
| 6 | | Emergency stop button Interrupteur d'arrêt d'urgence Botón parada de emergencia Pulsante arresto di emergenza |
| 7 | | Fuel tank cap with external key Bouchon gasoil avec clé positionne à l'extérieur Tapo gasoleo con llave situado a l'externo Tappo gasolio con chiave posizionato all'esterno |
| 8 | | Fully banded baase frame Réservoir amovible avec bague de retention Tanque integrado sfilabile con el envase para recoger los líquidos Serbatoio integrato sfilabile con vasca raccolta liquidi |
| 9 | | Central lifting hook Crochet central d'enlèvement Gancho de elevación Gancio di sollevamento centrale |
| 10 | | Doors location convenient to controls and service area Placement des portes pour rendre les contrôles plus faciles Colocación de las puertas para facilitar los controles Collocazione delle porte per facilitare i controlli |
| 11 | | High serviceability level Haut niveau d'accessibilité pour la manutention Alto nivel de accesibilidad para la manutención Alto livello di accessibilità per la manutenzione |
| 12 | | Large cable entry area for easy installation Grande zone d'entré des câbles pour une installation plus facile Amplia área de entrada cables para una instalación fácil Ampia area di entrata cavi per una facile installazione |
| 13 | | Galvanized metal steel sheet pre-treated prior to powder coating Tôles en acier galvanisé pré-traitées avant le vernissage à poudre Chapas de acero cincado pre-tratadas antes de la pintura a polvo Lamiera di acciaio zincato pre-trattate prima della verniciatura a polvere |

**SOUND PROOF VERSION DRAWING
DESSIN VERSION INSONORIZEE
DIBUJO VERSION INSONORISADA
DISEGNO VERSIONE INSONORIZATA**



VOLVO PENTA GENSET ENGINE

TAD1341GE

NEW!

308 kW (419 hp) at 1500 rpm, 335 kW (456 hp) at 1800 rpm, acc. ISO 3046

The TAD1341GE is a powerful, reliable and economical Generating Set Diesel Engine built on the dependable Volvo in-line six concept.

Durability & low noise

Designed for easy, fast and economical installation. Field tested to ensure highest standard of durability and long life. Well-balanced to produce smooth and vibration-free operation with low noise level.

To maintain a controlled working temperature in cylinders and combustion chambers, the engine is equipped with piston cooling. The engine is also fitted with replaceable cylinder liners and valve seats/guides to ensure maximum durability and service life of the engine.

Low exhaust & noise emission

The state of the art, high-tech injection and highly efficient charge air system with low internal losses contributes to excellent combustion and low fuel consumption.

The TAD1341GE is EU Stage 2 emission certified. An electronically controlled viscous fan drive is available giving substantially lower noise and fuel consumption.

Easy service & maintenance

Easily accessible service and maintenance points contribute to the ease of service of the engine.

Technical description

Engine and block

- Cast iron cylinder block with optimum distribution of forces without the block being unnecessarily heavy.
- Wet, replaceable cylinder liners
- Piston cooling for low piston temperature and reduced ring temperature
- Tapered connecting rods for increased piston lifetime
- Crankshaft induction hardened bearing surfaces and fillets with seven bearings for moderate load on main and high-end bearings
- Case hardened and Nitrocarburized transmission gears for heavy duty operation
- Keystone top compression rings for long service life
- Viscous type crankshaft vibration dampers to withstand single bearing alternator torsional vibrations
- Replaceable valve guides and valve seats
- Over head camshaft and four valves per cylinder



Features

- Excellent load acceptance
- Highly efficient cooling system
- Dual Speed 1500 / 1800 rpm
- EMS 2
- EU Stage 2 emission certified
- Wide range of optional equipment including visco fan.

Lubrication system

- Full flow oil cooler
- Full flow disposable spin-on oil filter, for extra high filtration
- The lubricating oil level can be measured during operation
- Gear type lubricating oil pump, gear driven by the transmission

Fuel system

- Electronic high pressure unit injectors
- Fuel prefilter with water separator and water-in-fuel indicator / alarm
- Gear driven low-pressure fuel pump
- Fine fuel filter with manual feed pump and fuel pressure switch

Cooling system

- Efficient cooling with accurate coolant control through a water distribution duct in the cylinder block. Reliable sleeve thermostat with minimum pressure drop
- Belt driven coolant pump with high degree of efficiency
- Electronically controlled viscous fan drive provides lower noise and fuel consumption (optional).
- Coolant filter as standard

Turbo charger

- Efficient and reliable turbo charger
- Electronically controlled Waste-gate
- Extra oil filter for the turbo charger

Electrical system

- Engine Management System 2 (EMS 2), an electronically controlled processing system which optimizes engine performance. It also includes advanced facilities for diagnostics and fault tracing.
- Possibility to perform a start battery test according to the NCPA requirements via CAN bus signals.
- The instruments and controls connect to the engine via the CAN SAE J1939 interface, either through the Control Interface Unit (CIU) or the Digital Control Unit (DCU). The CIU converts the digital CAN bus signal to an analog signal, making it possible to connect a variety of instruments. The DCU is a control panel with display, engine control, monitoring, alarm, parameter setting and diagnostic functions. The DCU also presents error codes in clear text.
- Sensors for oil pressure, oil temp, boost pressure, boost temp, coolant temp, fuel temp, water in fuel, fuel pressure and two speed sensors.

**VOLVO
PENTA**

TAD1341GE

Technical Data

General

| | | |
|--|-------------|--|
| Engine designation | TAD1341 GE | |
| No. of cylinders and configuration | in-line 6 | |
| Method of operation | 4-stroke | |
| Bore, mm (in.) | 131 (5.16) | |
| Stroke, mm (in.) | 158 (6.22) | |
| Displacement, l (in ³) | 12.78 (780) | |
| Compression ratio | 18.1:1 | |
| Wet weight, engine only, kg (lb) | 1325 (2921) | |
| Wet weight with Gen Pac, kg (lb) | 1790 (3946) | |

| | | |
|-----------------------|-----------------|-----------------|
| Performance | 1500 rpm | 1800 rpm |
| with fan, kW (hp) at: | | |
| Prime Power | 271 (369) | 287 (390) |
| Standby Power | 298 (405) | 317 (431) |

| | | |
|---|-----------------|-----------------|
| Lubrication system | 1500 rpm | 1800 rpm |
| Oil consumption, liter/h (US gal/h) at: | | |
| Prime Power | 0.04 (0.011) | 0.05 (0.013) |
| Standby Power | 0.04 (0.011) | 0.05 (0.013) |
| Oil system capacity incl filters, liter | 36 | |

| | | |
|-------------------------------|-----------------|-----------------|
| Fuel system | 1500 rpm | 1800 rpm |
| Specific fuel consumption at: | | |
| Prime Power, g/kWh (lb/hph) | | |
| 25 % | 230 (0.373) | 237 (0.384) |
| 50 % | 202 (0.327) | 211 (0.342) |
| 75 % | 195 (0.316) | 202 (0.327) |
| 100 % | 191 (0.310) | 200 (0.324) |
| Standby Power, g/kWh (lb/hph) | | |
| 25 % | 226 (0.366) | 242 (0.392) |
| 50 % | 200 (0.324) | 209 (0.339) |
| 75 % | 194 (0.314) | 201 (0.326) |
| 100 % | 191 (0.310) | 200 (0.324) |

| | | |
|--|-----------------|-----------------|
| Intake and exhaust system | 1500 rpm | 1800 rpm |
| Air consumption, m ³ /min (cfm) at: | | |
| Prime Power | 22.7 (802) | 26.4 (932) |
| Standby Power | 24.1 (849) | 29.0 (1023) |
| Max allowable air intake restriction, kPa (PSI) | 5 (0.7) | |
| Exhaust gas temperature after turbine, °C (°F) at: | | |
| Prime Power | 392 (738) | 369 (696) |
| Standby Power | 398 (748) | 390 (734) |
| Max allowable back-pressure in exhaust line, kPa (PSI) | 10 (1.5) | |
| Exhaust gas flow, m ³ /min (cfm) at: | | |
| Prime power | 49.0 (1732) | 58.0 (2047) |
| Standby Power | 52.0 (1839) | 61.6 (2175) |

| | | |
|---|-----------------|-----------------|
| Cooling system | 1500 rpm | 1800 rpm |
| Fan power consumption, std ratio, kW (hp) 10 (14) | | 18 (24) |

| | | |
|---|-----------------|-----------------|
| Cooling performance | 1500 rpm | 1800 rpm |
| Max cooling air flow, m ³ /s (cfs) | 6.7 (237) | 8.2 (290) |
| AOT at max cooling air flow, °C (°F): | | |
| Prime Power | 69 (156) | 68 (154) |
| Standby Power | 66 (151) | 65 (149) |

Standard equipment

| | Engine | Gen Pac |
|---|--------|---------|
| Engine | | |
| Automatic belt tensioner | • | • |
| Lift eyelets | • | • |
| Flywheel | | |
| Flywheel housing with conn. acc. to SAE 1 | • | • |
| Flywheel for 14" flex. plate and flexible coupling | • | • |
| Engine suspension | | |
| Fixed front suspension | • | • |
| Lubrication system | | |
| Oil dipstick | • | • |
| Full-flow oil filter of spin-on type | • | • |
| By-pass oil filter of spin-on type | • | • |
| Oil cooler, side mounted | • | • |
| Low noise oil sump | • | • |
| Fuel system | | |
| Fuel filters of disposable type | • | • |
| Electronic unit injectors | • | • |
| Pre-filter with water separator | • | • |
| Intake and exhaust system | | |
| Air filter with replaceable paper insert | • | • |
| Air restriction indicator | • | • |
| Air cooled exhaust manifold | • | • |
| Connecting flange for exhaust pipe | • | • |
| Exhaust flange | • | • |
| Turbo charger, low right side | • | • |
| Cooling system | | |
| Radiator incl intercooler | •1) | • |
| Coolant pump | • | • |
| Fan hub | • | • |
| Thrust fan | •1) | • |
| Fan guard | - | • |
| Belt guard | - | • |
| Control system | | |
| Engine Management System (EMS) with CAN-bus interface SAE J1939 | • | • |
| Alternator | | |
| Alternator 80 A | • | • |
| Starting system | | |
| Starter motor | • | • |
| Connection facility for extra starter motor | • | • |
| Instruments and senders | | |
| Temp.- and oil pressure for automatic stop/alarm | • | • |
| Other equipment | | |
| Expandable base frame | - | • |
| Engine Packing | | |
| Plastic wrapping | • | • |

1) must be ordered, see order specification

2) Available later

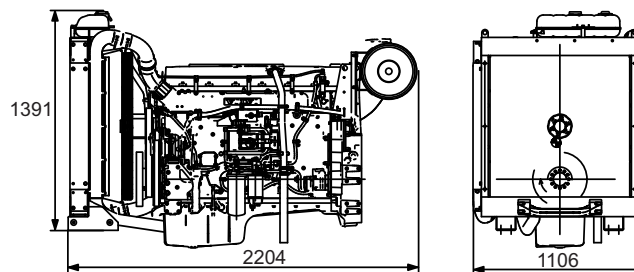
- optional equipment or not applicable

• included in standard specification

For our wide range of optional equipment, please see Order specification.

Dimensions TAD1341GE

Not for installation



Note! Not all models, standard equipment and accessories are available in all countries.

All specifications are subject to change without notice.

The engine illustrated may not be entirely identical to production standard engines.

Power Standards

The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271. The technical data applies to an engine without cooling fan and operating on a fuel with calorific value of 42.7 MJ/kg (18360 BTU/lb) and a density of 0.84 kg/liter (7.01 lb/US gal), also where this involves a deviation from the standards. Power output guaranteed within 0 to +2% at rated ambient conditions at delivery. Ratings are based on ISO 8528. Engine speed governing in accordance with ISO 3046/IV, class A1 and ISO 8528-5 class G3

Exhaust emissions

The engine complies with EU stage 2 emission legislation according to the Non Road Directive EU 97/68/EEC. The engine also complies with TA-luft -50% exhaust emission regulations.

Rating Guidelines

PRIME POWER rating corresponds to ISO Standard Power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours instead of commercially purchased power. A10 % overload capability for governing purpose is available for this rating.

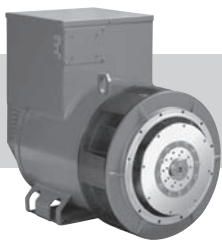
STANDBY POWER rating corresponds to ISO Standard Fuel Stop Power. It is applicable for supplying standby electrical power at variable load in areas with well established electrical networks in the event of normal utility power failure. No overload capability is available for this rating.

1 hp = 1 kW x 1.36

VOLVO PENTA

AB Volvo Penta

SE-405 08 Göteborg, Sweden
www.volvopenta.com



meccalte



ECO 38N

MECCALTE spa - Via Roma, 20 - 36051 CREAZZO (VI) ITALIA
 Tel. +39 0444/396111 - Fax +39 0444/396166 - e-mail : info@meccalte.it
 web site: www.meccalte.com

4 POLE

CHARACTERISTICS

INDUSTRIAL RATINGS

ambient 40° C

| Type | KVA - cos 0.8φ- 3 Phase continuous | | | | | | | Efficiency | | |
|-------------------|------------------------------------|------------|-----|---------------|-------------------|------------|------------|-----------------------|------|------|
| | CL. H (ΔT= 125°C) | | | | CL. F (ΔT= 105°C) | | | η % CL. H (ΔT= 125°C) | | |
| Series Star Y | 380 | 400 | 415 | IP45 400 V | 380 | 400 | 415 | 2/4 | 3/4 | 4/4 |
| Parallel Star YY | 190 | 200 | 208 | | 190 | 200 | 208 | | | |
| Series Delta Δ | 220 | 230 | 240 | | 220 | 230 | 240 | | | |
| Parallel Delta ΔΔ | 110 | 115 | 120 | | 110 | 115 | 120 | | | |
| ECO38-1SN/4 | 180 | 180 | 180 | | 145 | 170 | 170 | | | |
| ECO38-2SN/4 | 200 | 200 | 200 | 160 | 185 | 185 | 185 | 91,7 | 92,9 | 92,7 |
| ECO38-3SN/4 | 225 | 225 | 225 | 180 | 207 | 207 | 207 | 92 | 93,3 | 93 |
| ECO38-1LN/4 | 250 | 250 | 250 | 200 | 230 | 230 | 230 | 92,4 | 93,7 | 93,4 |
| ECO38-2LN/4 | 300 | 300 | 300 | 240 | 275 | 275 | 275 | 92,7 | 94 | 93,7 |
| ECO38-3LN/4 | 350 | 350 | 350 | 280 | 320 | 320 | 320 | 92,6 | 93,7 | 93,5 |

| Type | CL. H (ΔT= 125°C) | | | | CL. F (ΔT= 105°C) | | | Efficiency | | |
|-------------------|-------------------|-----|------------|---------------|-------------------|-----|------------|-----------------------|------|------|
| | CL. H (ΔT= 125°C) | | | | CL. F (ΔT= 105°C) | | | η % CL. H (ΔT= 125°C) | | |
| Series Star Y | 440 | 460 | 480 | IP45 480 V | 440 | 460 | 480 | 2/4 | 3/4 | 4/4 |
| Parallel Star YY | 220 | 230 | 240 | | 220 | 230 | 240 | | | |
| Series Delta Δ | 254 | 265 | 277 | | 254 | 265 | 277 | | | |
| Parallel Delta ΔΔ | 127 | 133 | 138 | | 127 | 133 | 138 | | | |
| ECO38-1SN/4 | 220 | 220 | 220 | | 175 | 205 | 205 | | | |
| ECO38-2SN/4 | 240 | 240 | 240 | 192 | 220 | 220 | 220 | 92,8 | 94 | 93,8 |
| ECO38-3SN/4 | 270 | 270 | 270 | 215 | 250 | 250 | 250 | 93,4 | 94,5 | 94,2 |
| ECO38-1LN/4 | 300 | 300 | 300 | 240 | 280 | 280 | 280 | 93,7 | 94,9 | 94,5 |
| ECO38-2LN/4 | 340 | 360 | 360 | 280 | 310 | 330 | 330 | 93,9 | 95,1 | 94,7 |
| ECO38-3LN/4 | 420 | 420 | 420 | 330 | 385 | 385 | 385 | 93,3 | 94,5 | 94,3 |

STANDBY RATINGS

| Type | KVA Temp. Rise / Ambient °C | | | KVA Temp. Rise / Ambient °C | | |
|-------------|-----------------------------|------------|------------|-----------------------------|------------|------------|
| | 50 Hz | | | 60 Hz | | |
| | 163° / 27° | 150° / 40° | 125° / 27° | 163° / 27° | 150° / 40° | 125° / 27° |
| ECO38-1SN/4 | 196 | 188 | 188 | 236 | 230 | 230 |
| ECO38-2SN/4 | 220 | 211 | 211 | 264 | 253 | 253 |
| ECO38-3SN/4 | 250 | 237 | 237 | 300 | 284 | 284 |
| ECO38-1LN/4 | 275 | 264 | 264 | 330 | 316 | 316 |
| ECO38-2LN/4 | 330 | 315 | 315 | 396 | 378 | 378 |
| ECO38-3LN/4 | 370 | 360 | 360 | 444 | 432 | 432 |

| Type | J (Kgm ²) B3-B14 FORM | Weight (Kg) | Air Volume | | Noise dB(A) | | | |
|-------------|---|----------------|-----------------------------|-----------------------------|-------------|----|-------|----|
| | | | Air Volume | | 50 Hz | | 60 Hz | |
| | | | 50 Hz (m ³ /min) | 60 Hz (m ³ /min) | 1m | 7m | 1m | 7m |
| ECO38-1SN/4 | 1,7243 | 510 | 32 | 39 | 82 | 69 | 86 | 73 |
| ECO38-2SN/4 | 1,8799 | 560 | | | | | | |
| ECO38-3SN/4 | 2,0751 | 590 | | | | | | |
| ECO38-1LN/4 | 2,3481 | 680 | | | | | | |
| ECO38-2LN/4 | 2,8342 | 765 | | | | | | |
| ECO38-3LN/4 | 3,4747 | 905 | | | | | | |

ACCESSORIES

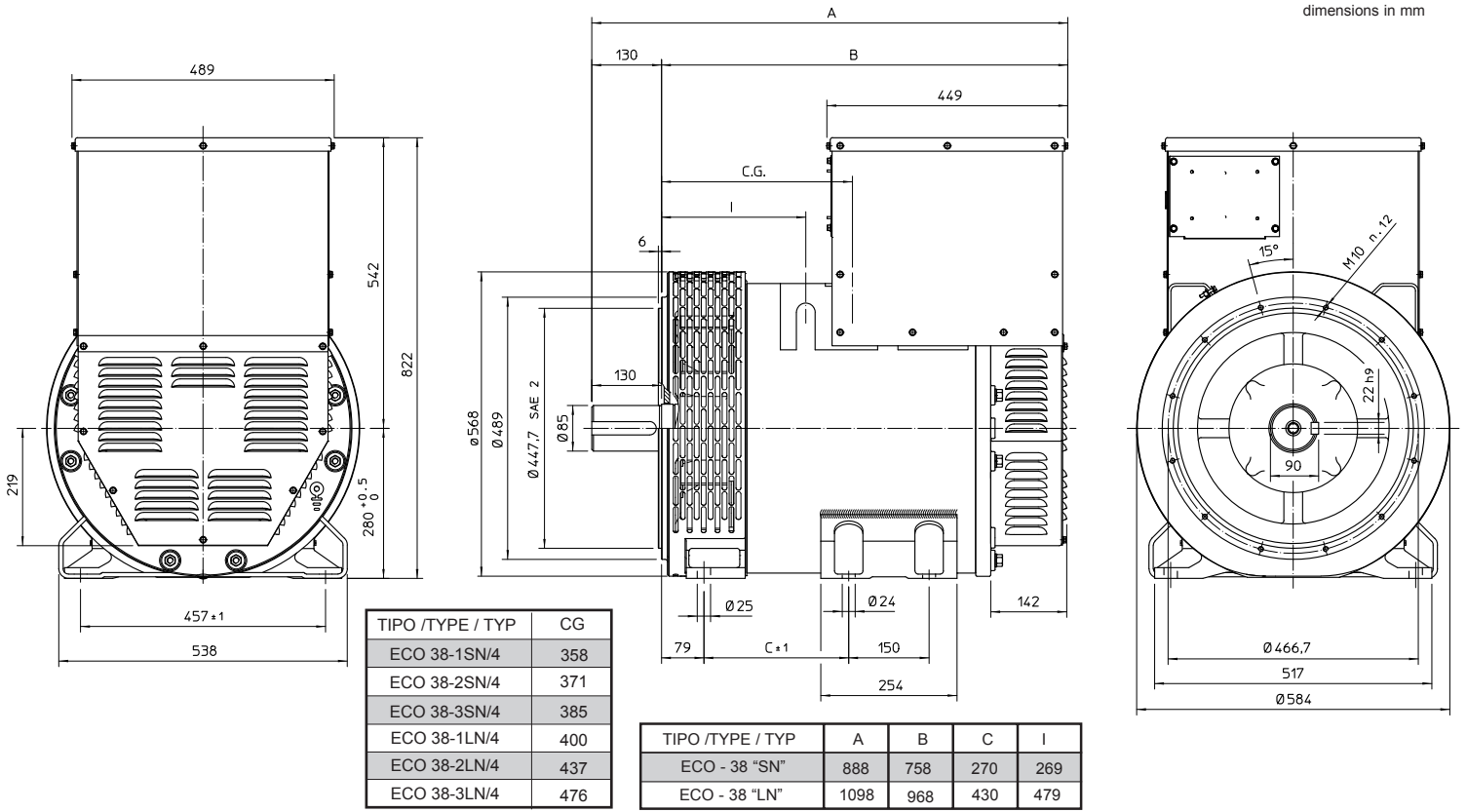
| REGULATOR | | | | PARALLEL DEVICE | THERMAL PROTECTION | | | HEATERS | MECHANICAL PROTECTION | | |
|-----------|-------|-------|------|-----------------|--------------------|---------------|-------|---------|-----------------------|------|------|
| DSR | DER-1 | SR7/2 | UVR6 | | PTC | BIMET. DEVICE | PT100 | | IP21 | IP23 | IP45 |
| ● | □ | □ | □ | □ | □ | □ | □ | □ | ● | □ | □ |

● = Standard
 □ = Optional

Rating



OVERALL DIMENSIONS B3-B14 FORM



OVERALL DIMENSIONS MD35 FORM

