FIREPUMP DP6970TiH-CRDi DIESEL POWER PACK HEAT EXCHANGER COOLED

KEY DETAILS

POWERMaXX FIRE

SHORT MOTOR CONSTRUCTION

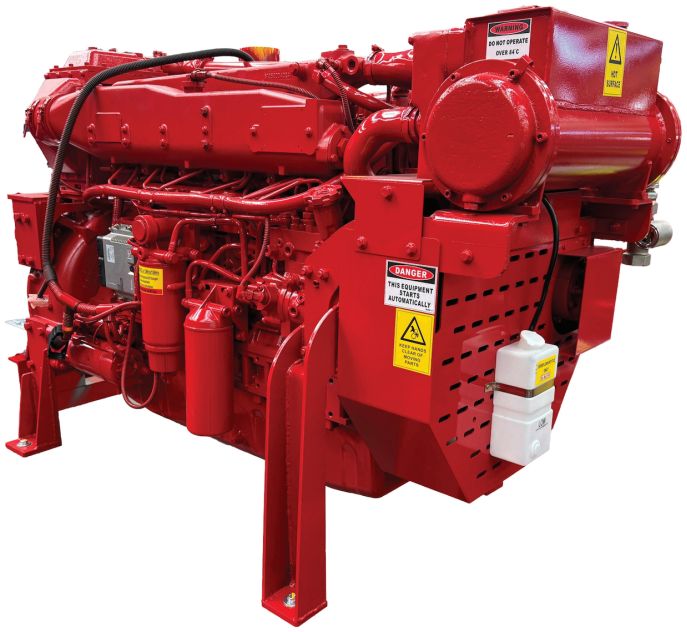
- Cast Iron Block
- Wet Liners
- Fully Floating Pistons
- Nodular Iron Crankshaft
- High Volume Oil Pump
- High Volume Oil Sump

CYLINDER HEAD

- Individual Cast Iron Cylinder Heads
- Adjustable Rocker Arms
- Rubber Valve Gasket

CONSTRUCTION

- Heavy Duty Design
- High Volume Cooling System
- Simple, Maintenance Free, High Pressure Fuel System
- Direct Injection Combustion Chamber
- High Flow Fuel, Oil & Donaldson Air Filters



MAXIMUM POWER RATING - For 'HP' MULTIPLY x 1.34

Power Output Rated 280kW @ 2200rpm

Model	1500rpm	1600rpm	1800rpm	2200rpm
DP6970TiH-CRDi	258kW	265kW	280kW	280kW

PRODUCT CHARACTERISTICS

DESIGN & QUALITY

BKB Group firepump engines offer industry leading value for money. Proven quality and Australian design, powering over thousands of firepumps nationwide. All engines come backed by a 2 year warranty and are constructed to last. When the job needs to be done, you can rely on BKB Engines to perform.

SERVICE KITS

All engines can be supplied with service kits. All parts used in service are readily available, high quality parts including Donaldson filters. Kits provide a complete ready package for servicing. Included in the kits are belt set, hose kit and all filters; oil, primary and secondary fuel and air cleaners.

CONTROLLER

The BKB Group diesel engine control system delivers simplicity and reliability. Proudly Australian designed and built to AS2941-2013 (Fixed Fire-Pumpset Systems). Available in 12V & 24V. Monitors, displays and records diesel engine information. The construction incorporates high quality industrial components and an advanced microprocessor controller.

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DESIGN SPECIFICATIONS

Model	DP6970TiH-CRDi
Type	Inline 6 Cylinder - 2 Valve P/Cyl - OHV
Fuel	Direct Injection – High Pressure Common Rail Fuel System
Bore/Stroke	126 x 155
Capacity	11.5Ltr
Compression	15:5:1
Intake	Turbocharged
Cooling	Water
Voltage	24V
Min Speed	850rpm
Max Speed	2200rpm

SERVICE INFORMATION

Fuel Filter	P550932 x2 & P550778
Oil Filter	Donaldson P553771 x 2
Air Filter	Donaldson C125004
Oil Capacity	32 Ltrs
Recommended Battery - Min	720CCA x 2 / 120 A/H x 2
Bell Housing	SAE1
Cooling System Capacity	55ltrs
Drive	SAE 14"
Service Interval	First Service at 12month/ 150hrs then each 12month/250Hours
Coolant	Glycol
Oil Type	15W40 - SAE30
Major Service	2yrs/1000hrs of operation

POWER PACK PRODUCED WITH:

- Compliance with AS2941-2013
- Oil Pressure Sender & Temp Sender
- SAE 11.5" Flywheel
- Mounting Feet
- Belt Guard
- Flexible Exhaust Coupling
- Condensation Trap & Muffler
- Pull to Stop Solenoid
- Oil & Coolant
- Jacket Heater

ELECTRICAL

Starter Motor	24V - 7kW - Reduction Drive
Alternator	24V - 40Amp - External Regulator
Oil Pressure Sender	10 Bar (VDO Compatible)
Temp Sender	30 - 120°C
RPM Sensor	Magnetic Pulse Type - M18 x 1.5
Fuel STOP Solenoid	24V - Pull to Stop - Two Wire - Body Earth

ENGINE SPECIFICATIONS

Fuel Consumption @ 75% Load - 2200rpm	.240gr/kWhr
Approx Fuel Consumption at 100% load - 2600rpm	79ltrs per/hour
Cooling Water Flow	Min@20°C 4.7ltrs/sec
Intake Air Flow	540ltrs/sec
Exhaust Pipe Size	6"/150mm
Exhaust Flow	1560 ltrs/sec
Exhaust Heat Rejection	293kW
Heat Rejection to Atmosphere	38kW
Cooling System Heat Rejection	270kW
Exhaust Temp Max	600°C
Max Exhaust Backpressure	7kPa
Max Coolant Temp	85°C

COOLING SYSTEM

Type	Heat Exchanger Cooled - Tube Type

ENGINE MOUNTING

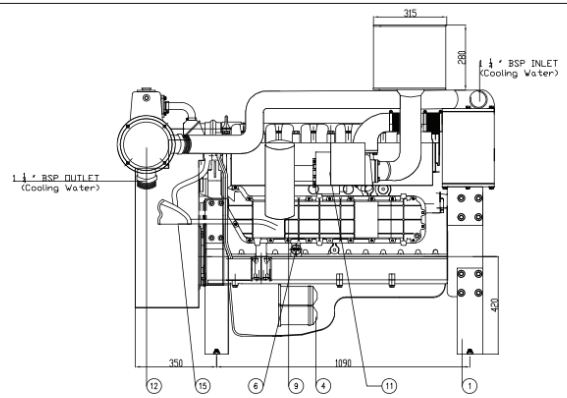
Mounting Bolts	M16

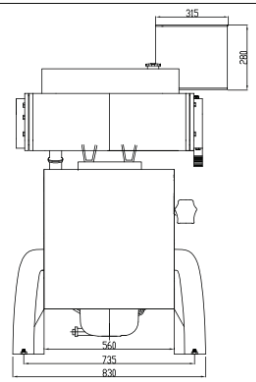
Note:

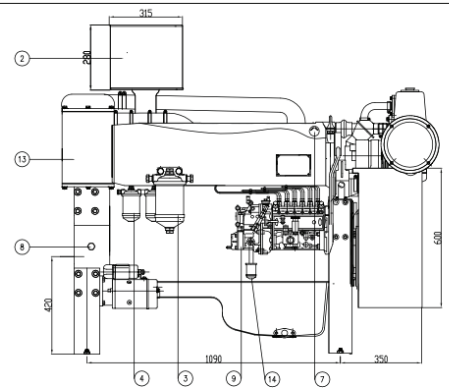
Variations to engines may be made without notice.

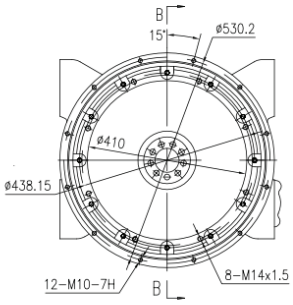
FIREPUMP DP6970TiH-CRDi DIESEL POWER PACK

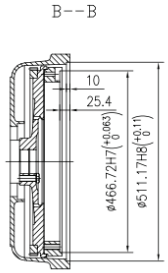
HEAT EXCHANGER COOLED



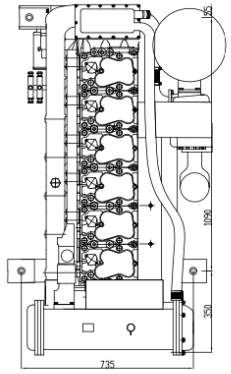








SAE 1 BELL HOUSING
SAE 14" FLYWHEEL



ITEM:	DESCRIPTION:	QTY:
15	JACKET HEATER	1
14	STOP SOLENOID	1
13	INTERCOOLER	1
12	HEAT EXCHANGER	1
11	TURBO CHARGER	1
10	SPEED CONTROL	1
9	EXHAUST OUT	1
8	RPM SENSOR	1
7	TEMP SENSOR	1
6	OIL SENSOR	1
5	OIL FILTER	2
4	SECONDARY FUEL FILTER	2
3	PRIMARY FUEL FILTER	1
2	AIR FILTER	1
1	MOUNT SUPPORT	4

DRAWING TITLE:
DP - 6970TiH-CRDi Heat Exchanger: General Arrangement

REV:	DESCRIPTION:	DATE:	DRAWN BY:
1	REVISED ENGINE DRAWING	09/11/2017	M.O.Y.

NOTES:
- ALL DIMENSIONS SHOULD BE VERIFIED BEFORE INSTALLATION.
- NO PORTION OF THIS DRAWING MAY BE REPRODUCED OR ALTERED WITHOUT WRITTEN PERMISSION FROM POWER INDUSTRIES AUSTRALIA.
- ALL DIMENSIONS ARE IN MM.

TOLERANCES:
ASSEMBLY DIMENSIONS ±3MM
FABRICATED DIMENSIONS ±2MM
MACHINING DIMENSIONS ±0.125MM
UNLESS SPECIFIED OTHERWISE

REVIEWED BY: SCOTT LACEY
DWG NO: DWG–DP6970Ti.HX–01
SCALE: Not to Scale
REV: 1

ADDRESS:
38–40 LICOLA DRIVE,
DANDENONG SOUTH, 3175

PHONE NO:
1300 188 477