

P110 IRRIGATION POWER UNITS



SPECIFICATIONS

Engine Type

4 cylinder, 2 valve, turbo-charged/
charge air-cooled

Engine Displacement

4.5 liters (272 cu. in.)

Nominal Power Developed

114 hp (85 kW) @ 2200 rpm

Warranty

2 year/2,000 hour
(whichever occurs first)

Engine Certification

The P110 irrigation power unit meets
Tier III EPA, CARB & EU Emissions
Standards

FEATURES/BENEFITS

Case IH Irrigation Power Units are O.E.M. designed, tested and manufactured, and offer a combination of quality, value, availability and warranty that few can match. The P110 features a balanced engine for smooth operation.

All irrigation power units are designed and tested to give you unparalleled fuel efficiency and dependability, and are factory tested before shipment to insure optimum quality and performance.

Case IH Irrigation Power Units also feature a side mounted, rodent proof control panel that can be easily removed and remounted to meet your specific requirements.

- Coolant Temperature Shutdown (Safety Shutdown Standard)
- Coolant Level Shutdown
- Low Oil Pressure Shutdown

The P110 irrigation power unit features the following optional equipment:

- Steel battery cables
- Steel battery trays
- Side engine mounted oil fills
- Oil level shutdown
- Hood Completion Kits
- Double sheave front crankshaft pulley

All optional equipment is available from the factory or installed by your Case IH dealer.

All units come with a 2 year/2,000 hour warranty, which ever occurs first.

The P110 irrigation power unit meets Tier III EPA, CARB & EU Emissions Standards.

All units are painted with a factory proven dry-coat paint finish to protect against fading and damage from the outside elements.

Your Case IH dealer can help you maintain your irrigation power unit through regular oil changes and by performing the required maintenance checks. You can also order Original Equipment Manufacturer (O.E.M.) repair parts for your irrigation power unit from your Case IH dealer.

Case IH Irrigation Power Units offer O.E.M. quality that's better than the competition. Case IH Irrigation Power Units are produced in a manufacturing setting that uses strict processes, consistent use of components and stringent quality controls.

Control panel features a full gauge package including:

- Coolant Temperature Gauge
- Engine Oil Pressure Gauge
- Voltmeter
- Tachometer
- Hourmeter
- Key Switch

CONTINUOUS HORSEPOWER RATINGS

DESCRIPTION	2200 RPM	2000 RPM	1800 RPM
Rated Gross Power	125 hp (93 kW)	123 hp (92 kW)	117 hp (87 kW)
Rated Torque	297 lb./ft. (403 Nm)	324 lb./ft. (439 Nm)	340 lb./ft. (461 Nm)
Fuel Consumption BSFC	0.395 lb./hp-hr. (240 g/kW-hr.)	0.390 lb./hp-hr. (237 g/kW-hr.)	0.385 lb./hp-hr. (234 g/kW-hr.)
Net Power (less optional equip.)	114 hp (85 kW)	114 hp (85 kW)	111 hp (83 kW)
Fuel Consumption (assuming fuel density of 835 kg/m ³)	7.06 gal./hr. (26.7 L/hr.)	6.90 gal./hr. (26.1 L/hr.)	6.44 gal./hr. (24.3 L/hr.)
Peak Torque	387 ft.-lbs. (525 Nm) @ 1400 rpm	387 ft.-lbs. (525 Nm) @ 1400 rpm	387 ft.-lbs. (525 Nm) @ 1400 rpm
Altitude Capability without Derating	9,800 ft. (3,000 m)	9,800 ft. (3,000 m)	9,800 ft. (3,000 m)

Optional low oil level shutdown.



Standard rodent-proof instrument panel.



Double sheave front crankshaft pulley is optional.



P110 SPECIFICATIONS

Engine Model	F4GE0454A*D6
Engine Type	4 cylinder, 2 valve, turbo-charged/charge air-cooled
Engine Displacement	272 cu. in. (4.5 liters)
Bore and Stroke	4.09 x 5.02 in. (104 x 132 mm)
Compression Ratio	17.5 +/- 0.5:1
Engine Configuration	4 cylinder, in-line, four-stroke cycle (firing order 1,3,4,2)
Description	Turbo-charged, compression ignition, direct injection from Robert Bosch rotary pump with balancer and internal EGR
Governor Breakaway	2250 rpm +/- 25 rpm
Governor Regulation	8% +/- 1%
High Idle Speed	2430 +/- 50 rpm
Low Idle Speed	800 rpm +/- 50 rpm
Nominal Power Developed	114 hp (85 kW) @ 2200 rpm
Nominal Max Torque	387 ft.-lbs. (525 Nm) @ 1250 rpm
Altitude Capacity	9,800 ft. (3000 m)
Engine Certification	Tier III, US EPA heavy-duty non-road emissions, EU heavy-duty non-road emissions and California Air Resources Board (CARB)

ADDITIONAL INFORMATION

STANDARD EQUIPMENT	WEIGHTS	OPTIONAL EQUIPMENT
Air Cleaner: two stage	With PTO	Low Oil Level Shutdown
Air Cleaner Restriction Indicator	– with hood 1,502 lbs. (681.3 kg)	PTO – 11.5 in. Single Plate
Alternator: 14 volt, 90 amp	– without hood 1,430 lbs. (648.6 kg)	Double Sheave Front Crankshaft Pulley
Battery Tray (shipped loose with unit)	Without PTO	Long Hood
Belt Guards	– with hood 1,422 lbs. (645.0 kg)	Steel Battery Tray
Curved Exhaust Pipe	– without hood 1,350 lbs. (612.3 kg)	Steel Battery Cables
Engine Lifting Brackets		
Engine Sub Base		
Instrument Panel:	DIMENSIONS	
– Oil Pressure Gauge with Low Pressure Shutdown	Height to Top of Hood: 48.16 in. (1223.3 mm)	
– Coolant Temperature Gauge with High Temperature Shutdown	Overall Height: 63.34 in. (1608.8 mm)	
– Hourmeter	Height to PTO Shaft: 15.88 in. (403.6 mm)	
– Voltmeter	Skid Width: 32.09 in. (815.0 mm)	
– Key Switch	Overall Width: 43.6 in. (1177.4 mm)	
– Emergency Stop Button	Skid Length: 50.34 in. (1278.5 mm)	
– Tachometer	Overall Length: 64.05 in. (1626.9 mm)	
Latching Front Cover	Diameter of PTO Shaft: 2.25 in. (57.2 mm)	
Low Coolant Level Shutdown		
Radiator Shroud		
Radiator with Deaeration Tank		
Starter: 12 volt		
Vernier, Self-Locking Speed Control Cable		



P110 ALLOWABLE SIDE-PULL LOADS – FOR STANDARD POWER TAKE OFFS

The following general information should be used for determining the actual applied load:

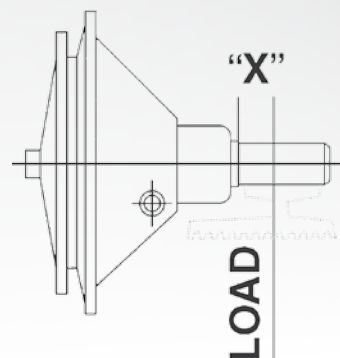
$$L = \frac{126,000 \times \text{HP}}{N \times D} \times F$$

Where:

L = Actual applied load (lbs.)
 N = Shaft speed (rev./min.)
 D = Pitch dia. of sheave, etc.
 F = Load factor

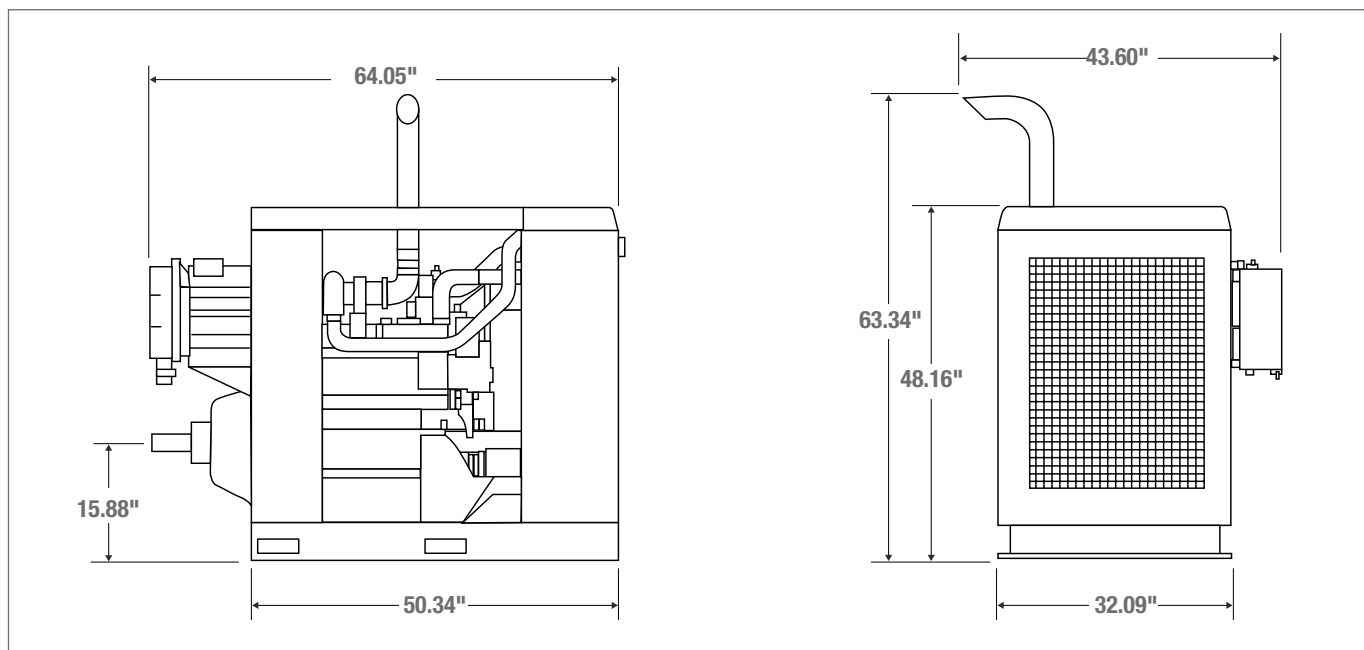
1.0 For chain or gear drive
 2.5 For all v-belt drives
 3.5 For flat bed

NOTE: Reciprocating compressors and other severe shock drives, multiply the above factors by 2.1



"X" Distance Inches (See Sketch)

PTO	RPM	1	2	3	4	5
SP-111HP-1	1000	2790	2600	2240	1840	1570
	1200	2630	2450	2240	1840	1570
	1800	2330	2170	2030	1840	1570
	2400	2140	1990	1865	1750	1570



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