



# **Genset Ratings**







Ratings Range - 60Hz Operation 1800 rpm Diesel

Standby	kW	44
	kVA	55
Prime	kW	40
	kVΑ	50

Sound Attenuation: at 7m / 23 ft 62 dBA











# Key features

HIPOWER rental generators are an efficient, reliable and versatile source of power designed to operate in the most extreme working conditions. An unique combination of innovative materials and design features combine for easy user operation and dependable power you can rely on.

- The Genset features a heavy-duty Yanmar 4 cycle diesel engine certified by the Environmental Protection Agency (EPA) to conform to Tier 3-4Interim non-road emissions regulations, an AC high capability alternator regulated by a precise Automatic Voltage Regulator controlled and protected by the manual auto-start DSE702 control module. A heavy-duty constructed chassis supports the complete set. The generator is protected by a best-in-class sound attenuated enclosure designed for durability and extreme application.
- Engine generating set tested to ISO 8528-5.
- The Genset engine is certified by the Environmental Protection Agency (EPA) Tier 3-4 Interim non-road emissions regulations.
- The brushless, single bearing, 4 poles, 12-wire generator end, with automatic voltage regulator has broad range reconnectability.
- The Genset is CSA certified.
- Global product support.
- Operations and maintenance manuals.
- 1 Year Standard Warranty. Extended warranties are also available.





#### Standard features



# Model: HRYW 50 T6



## **Engine**

- Industrial grade Tier 3-4 Interim Yanmar diesel Engine, 4 stroke, water cooled, provided with:
- Electric start 12V.
- Radiator with pusher fan.
- Standard water separator visible level fuel filter.
- Electronical governor.
- HWT/LOP senders.
- Medium duty 1-stage air filter with service indicator.
- Hot & rotating components (exhaust, fan,...) protections and radiator guards.
- Oil drain hand pump.

#### Alternator

- Self excited, self regulated alternator.
- Insulation class H, IP23 Protection.
- Automatic Voltage Regulator (AVR-EBS) (+/-1%).
- Vacuum impregnation.
- Permanent Magnet Generator (PMG).

#### CMA1 Control Panel

- DSE702 Manual and Auto-start control panel (2 wires).
- DSE702 Features: Manual start or remote Start, Engine Pre-heat, Engine monitoring and protection features, Protected solid state outputs, LED indicators.
- Engine protections: High coolant temperature, Low oil pressure, Low coolant level, Battery charging alternator failure, Overspeed.

• **Digital Metering**: Tamper proof engine hours counter.

Industrial Rental Towable Generator

Analogical Metering:

3 ammeters,

- 1 voltmeter + selector,
- 1 frequency meter,
- 1 fuel gauge,
- 1 analog hour meter,
- 1 battery charger gauge,
- 1 oil pressure gauge,
- 1 water temperature gauge.
- Siren
- Emergency Stop Button

#### **Power Panel**

- 3P Main Line Circuit Breaker for overload protection (UL listed)/ CSA 22.2).
- Main bus / Hardwire connection panel.
- Battery disconnect switch.

#### **Distribution Panel**

- Auxiliary socket box IP67, with individual breaker protection and 2 GFCI DUPLEX 20A 125VGFI for 110v duplex and 3 TWIST-LOCK 50A 2P+N+G.
- Direct access to auxiliary sockets with suitable protection.
- Secondary Main bus / hardwire connection (Load lugs).
- Camlocks (optional).
- Voltage selector switch. Lockable, with 3 positions (3phase 277/480V 3phase 120/208V 1phase 120/240V).







Model: HRYW 50 T6

# Standard features



#### **Electric Equipment**

- Battery charging alternator.
- Gel type, heavy-duty Starting battery(s) installed and connected to the engine include cables and rack.
- Ground connection prepared for ground spike (not supplied).

#### Chassis

- Heavy duty skid base with forklift pockets and drawbars.
- Extended run time high capacity fuel tank.
- 110% spill containment for engine oil, coolant and fuel spills.
- Easy access for chassis cleaning and fast draining of fuel tank.
- Oversized chassis to protect canopy with skids for dragging embedded and Forklift pockets for easy transport.
- Vibration isolators between chassis and generator.
- External fuel tank filling (lockable fuel cap)
- Chassis ready for mobile kit installation. (see mobile kits options).

#### **Enclosure**

- Heavy duty sound attenuated canopy made with high quality 11 gauge steel.
- Powder coat paint which exceeds 1,000 hour salt spray test.
- Stainless steel hardware and fasteners.
- Ultra silent all weather enclosures with Rock-Wool insulation and curved edges with minimum outside fasteners.
- Reinforced Single eye lifting point.
- Fuel tank external filling system (lockable filler cap).

 Emergency stops (double protection for emergency stop; inside on control panel + external on canopy).

Industrial Rental Towable Generator

- Door with window to view control panel.
- Easy access to radiator fill through roof on enclosure.
- Outlet for power cables.
- Recesses provision for quick release couplings (external fuel supply).

#### Exhaust

 Steel residential silencer of -35dBA attenuation, with rain cap.







Model: HRYW 50 T6

# **Optional features**



#### Engine (optional)

- Water Jacket Heater
- Low coolant level sensor.
- Secondary water separator fuel filter -RACOR type (Decanting filter with water detection kit, alarm signal and sensor contact).
- Heavy duty, two stage air filter with service indicator.

#### Alternator (optional)

• Anti-condensation heater.

#### Electric Equipment (optional)

- Battery isolator.
- Automatic battery chargers.

#### Distribution Panel (optional)

• Camlocks.

#### Chassis (optional)

• Leakage detector sensor.

#### Fuel System (optional)

- Three way fuel valve with quick disconnect fittings.
- Automatic fuel transfer pump.

#### Trailers (optional)

• Road towing trailers to DOT standards.





Model: HRYW 50 T6

GE GE	NSET RATING										
GENSET Model	ENGINE Model	ALTERNATOR Model	R VOLTAGE L-L Ph Hz	ST	150°C RI ANDBY R		ı	125°C R PRIME RA			
Wodei	Wiodei	Wodei		L-L			kW	kVA	Amps L-L	kW	kVA
HRYW 50 T6 4TNV98T PI 144 K	PI 144 K	120	1	60	26	32	2x133	24	30	2x125	
		240	1	60	26	32	133	24	30	125	
			208	3	60	44	55	153	40	50	139
	240	3	60	44	55	132	40	50	120		
			480	3	60	44	55	66	40	50	60

ENGINE SPECIFICATIONS			
Manufacturer		YANMAR	
Engine model		4TNV98T ZGGEH	
EPA Certification for:	Stage	Tier 3 - 4 Interim	
Rated	RPM	1800	
Nominal Power (PRIME)	kW - H	HP 45.6 62	
Nominal Power (STANDBY)	kW - H	HP 50.4 68.5	
Engine type		diesel 4-cycle	
Inyection type		DI	
Aspiration type		Turbocharged aspiration	
Cylinder arrangement		4 - L	
Bore and stroke	(mm) - In	n (98 x 110) (3.85 x 4.33)	
Displacement	L - in	n3 3.32 0	
Cooling system		water	
Governor Type		Electronic governor (ECO)	
Make		С	
Standard		С	
Starting voltage	Vcc	12	
Air cleaner type		Dry light duty	
Compression ratio		18.1	

AMPERAGE	
1 Phase 120V	2x125 Amps
1 Phase 240V	125 Amps
3 Phase 208V	139 Amps
3 Phase 240V	120 Amps
3 Phase 480V	60 Amps
Main Line Circuit Breaker Rating	150 Amps

Manufacturer	Stamford
Model (480V)	PI 144 K
Alternator Type	4 poles, rotating field
Excitation system	
Exciter Type	EBS
Leads: quantity, type	12, reconnectable
Stator Pitch	2/3
Insulation system	
Material	Class H
Temperature rise	150°C Standby
	125°C Prime
Bearing: quantity, type	Single bearing sealed
Coupling	Flexible disc
Amortisseur windings	Full
Automatic Voltage regulator	
PMG regulator or EBS	EBS (Excitation Boost System)
Voltage regulation, no load to full load	
PMG regulator or EBS	+/-1%
Load acceptance	100% of rated standby current
Unbalanced load capability	
Subtransient Reactance	
480V	14%
TIF	<50
Line Harmonics	5% Maximum
Peak motor starting kVA-480V:	
30% dip	131kVA
25% dip	102kVA
20% dip	76kVA







Model: HRYW 50 T6

ELECTRICAL SY	12V	
Battery charging alternator:		
Ground (negative/positive)		Negative
Volts (DC)	V	12
Ampere rating	Amp	40
Starter motor rated voltage (DC)	V	12
Starter motor rated	kW	2.30
Starter motor rated	HP	3.13
Battery recommendations		
Quantity & Min. Amps rating	Amp	92
Min. Cold Cranking Amps	Amp	440
Battery Voltage (DC)	V	12

FUEL SYSTEM				
Recommended fuel		diesel type		
Fuel supply line. min. ID	mm - in	M 14X150	M 0.55X5.9	
Fuel return line. min. ID	mm - in	M 14X150	M 0.55X5.9	
Fuel pump Type		(YPD-MP4)	Yanmar made	
Max. Lift fuel pump	m - ft	0.55	1.80	
Max. Flow to pump	(l/h) - gal/h	30	7.92	
Fuel filter				
Secondary filter		1	NP	
Secondary Water Separator		Opt.		
Primary filter		Provided		
Primary Water Separator		Provided		

FUEL CONSUMPTION		PRIME		STANDBY	
		l/h	gal/h	l/h	gal/h
100% Load	l/h - gal/h	12.9	3.4	13.7	3.6
75% Load	l/h - gal/h	9.7	2.6	10.2	2.7
50% Load	l/h - gal/h	6.9	1.8	7.0	1.8
25% Load	l/h - gal/h	-	-	-	-

EXHAUST SYS	PRIME	
Exhaust manifold type		Dry
Exhaust outlet diameter		
Sound Attenuated version	mm - In	65 - 2.56
Max. Exhaust temp. at full load	°C	580
	°F	1076
Exhaust Gas Flow	kg/h - Lb/h	347.76
	(m3/min) - ft3/min	13.8
Evacuated by the exhaust heat	kcal/kWh	204.52
Maximum allowed back pressure	(mm/H2O) - inH2O	1050
	(kPa)	0

COOLING SYSTEM				
Engine cooling air flow	m3/s - ft3/s	1.2 - 41.7		
Generator cooling air flow	m3/min - ft3/min	11.4 - 402.6		
Total cooling air flow (engine + g	generator + combustion)			
Sound Attenuated version	m3/min - ft3/min	216 - 7,628		
Total cooling capacity	l - gal	18.7 - 4.9		
Antifreeze recommended	l - gal	9.4 - 2.5		

LUBRICATION SYSTEM			
Oil Filter: quantity. type		1 x Cartridge paper element	
Oil pan capacity	I - gal	6.0 - 1.58	
Oil pan capacity with filter	I - gal	7.0 - 1.85	
Oil cooler		Water Cooled	
Recommended Oil		API (CF, CF-4, CI-4);	
Specific oil consumption full load	% fuel	0.14	
Oil Press	kgf/cm2	3.5	

VENTILATION REQUIREMENTS			
Air requirement for combustion at 100% load/rated speed	m3/h - ft3/h	233.4 - 8,242	
Cooling airflow	m3/h - ft3/h	5,165 - 182,411	
Heat rejected to ambient:			
From engine	kW - btu/min	11.98 - 681.9	
From alternator	kW - btu/min	1.12 - 63.74	







**SP**◎ Model: HRYW 50 T6

#### **Control & Power Panel**

- 1. CMA1 Control Panel.
- DSE702 Manual and Auto-start controller.
- √ 3 ammeters.
- ✓ 1 frequency meter.
- ✓ 1 voltmeter + selector.
- √ 1 fuel gauge.
- ✓ 1 analog hour meter.
- √ 1 selector switch.
- ✓ 1 Siren.
- √ 1 battery charger gauge.
- √ 1 oil pressure gauge.
- √ 1 water temperature gauge.
- ✓ Emergency Stop Button.

#### 2. CP Power Panel.

- ✓ Main Line Circuit Breaker for overload protection (UL listed / CSA22.2).
- ✓ Main bus /hardwire connection panel.



Pictures may include optional equipment and/or accessories.

## **Distribution Panel**

- 1. Auxiliary socket box IP67 with:
- ✓ Individual breaker protection for sockets.
- √ 2 GFCI duplex 20A 125VGFI for 110v duplex.
- √ 3 TWIST-LOCK 50A 2P+N + G.
- ✓ Secondary Main bus / hardwire connection (Load lugs).
- ✓ Camlocks.





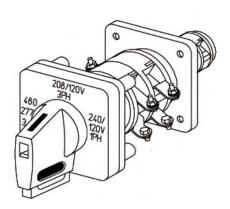
Pictures may include optional equipment and/or accessories.

# **∰**® Model: H

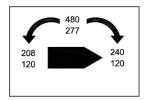
# Model: HRYW 50 T6

# Voltage Selector Switch

- 1. Voltage selector switch 3 positions padlockable (12h / 09h/ 03h).
- ✓ High (Series) Wye 480/277V 3Ph Y.
- ✓ Low (Parallel) Wye 208/120V 3Ph YY.
- ✓ Low (Parallel) Zig Zag 240/120V 1Ph ZZ
- 2. 7 contact stages, 14 contacts.
- 3. Switching angle 90°.



AC Generator Startor Widing connected for 2Phase +Neutral Parallel Zig-Zag: 120/240 VAC 60Hz



8 (V6)

10 (W2)

7 (V5)

11 (W5)

12 (W6) 5 (V1)

12 (W6) 5 (V1)

12 (W2)

13 (U5)

14 (U6)

14 (U6)

15 (V2)

16 (V2)

17 (U1)

18 (V6)

19 (W1)

10 (W2)

11 (W5)

11 (W5)

12 (W6)

12 (W6)

13 (W5)

14 (U6)

15 (W5)

16 (V2)

17 (U1)

18 (V6)

19 (W5)

10 (W5)

11 (W5)

11 (W5)

12 (W6)

13 (W5)

14 (U6)

15 (W5)

16 (V2)

17 (U1)

18 (W5)

19 (W5)

10 (W5)

11 (W5)

11 (W5)

11 (W5)

12 (W6)

13 (W5)

14 (W6)

15 (W6)

16 (W2)

17 (W5)

17 (W6)

18 (W6)

19 (W6)

10 (W5)

11 (W5)

11 (W5)

12 (W6)

13 (W5)

14 (W6)

15 (W6)

16 (W2)

17 (W6)

18 (W6)

19 (W6)

10 (W6)

10 (W6)

11 (W5)

11 (W5)

12 (W6)

13 (W5)

14 (W6)

15 (W6)

16 (W6)

17 (W6)

18 (W6)

19 (W6)

19 (W6)

10 (W6)

10 (W6)

10 (W6)

11 (W6)

11 (W6)

11 (W6)

12 (W6)

13 (W6)

14 (W6)

15 (W6)

16 (W6)

17 (W6)

18 (W6)

19 (W6)

10 (W6)

10 (W6)

10 (W6)

11 (W6)

11 (W6)

11 (W6)

12 (W6)

13 (W6)

14 (W6)

15 (W6)

16 (W6)

17 (W6)

18 (W6)

18 (W6)

19 (W6)

19 (W6)

10 (W6)

10 (W6)

10 (W6)

10 (W6)

11 (W6)

11 (W6)

11 (W6)

12 (W6)

13 (W6)

14 (W6)

15 (W6)

16 (W6)

17 (W6)

18 (W6)

18 (W6)

19 (W6)

19 (W6)

10 (W6)

10 (W6)

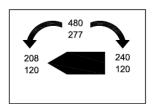
10 (W6)

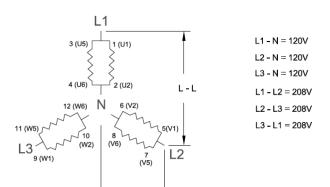
10 (W6)

10 (W6)

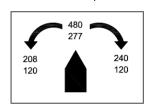
11 (W6)

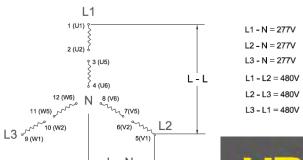
AC Generator Startor Widing connected for 3Phase Low Wye: 208/120 VAC 60Hz





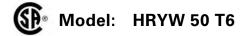
AC Generator Startor Widing connected for 3Phase Low Wye:480/277 VAC 60Hz











#### DSE702 Auto & Manual Start controller

- ✓ The DSE702 is a Manual and Auto start controller design for an excellent range of engine monitoring and protection features.
- ✓ The module has been designed to monitor low oil pressure, high engine temperature, overspeed, and a user-defined auxiliary input. When the module detects a fault it will automatically shut down the engine.
- ✓ The module also has the capability to monitor. battery charging by utilising the WL terminal on the charge alternator. On detecting a fault, it will light the warning LED on the front panel.
- ✓ Include a tamperproof LCD hours run counter to indicate total engine run time.
- ✓ Auto-start versions include an option for remote start signal input. This input allows the module to be started from a remote location.
- ✓ LED indicators for engine alarms and pre-heating operation.



- ★ All the protections are programmable to carry out "Alarm with Engine Stop".

  ★ (A) Alarm with Engine Stop.

  ★ (W) Warning Alarm without Engine Stop.

# **Engine Alarms**

- 1. Over speed (A).
- 2. Low oil pressure (A).
- 3. Low coolant level (A).
- 4. Battery charging alternator failure (w).
- 5. High coolant temperature (A).





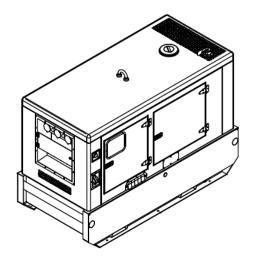






(\$₱ Model: HRYW 50 T6



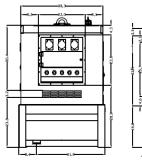


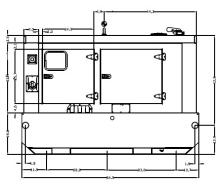
Enclosure model			BR	10
			(Length x Wid	lth x Height)
Overall size (L x W x H)		n	84.6 x 40.4 x 61.0	
	mm		2150 x 1025 x 1550	
Dry weight (with std. accessories)	Lb	Kg	2600	1180
				7

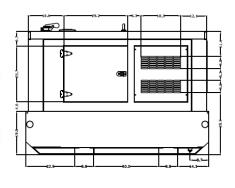
. •
in 158.2 x 77 x 14
mm 4018 x 1955 x 355
Lb Kg <b>850 386</b>
Gal L 87.2 330
100% 75% 50% 25%
25.7 34.1 48 -
Gal L 87.2 330 100% 75% 50% 25

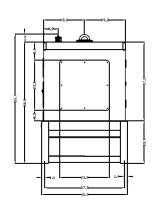
NOTE: The drawings are only representative of the overall dimensions.

For full detailed drawings please consult your local distributor or contact Himoinsa Power Systems www.hipowersystems.com









HIPOWER reserves the right to modify any characteristic without prior notice. The illustrations may include optional equipment and/or accessories. Not contractual images. The technical indications described correspond to the information available at the moment of printing or editing.











