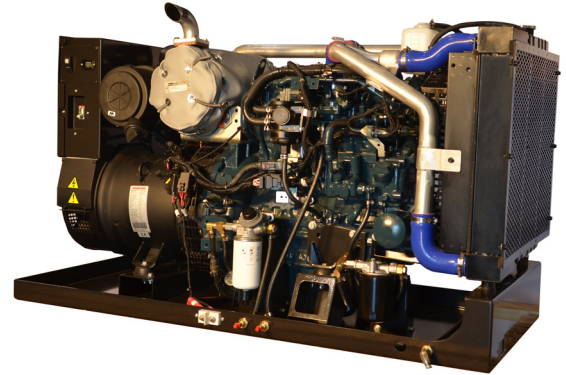




Commercial mobile generator set

CM 20-25
20 kW 60 Hz
U.S. EPA Tier 4

Not for stationary use



Features

- Includes a Diesel Oxidation Catalyst (DOC) for Tier 4 Final emissions compliance.
- One-year warranty backed by a worldwide Cummins twenty-four hour, seven days-a-week, distributor network
- Efficient and convenient operation monitoring and control:
 - Standard Power Command Control (PCC) 1302 technology provides digital (precise) frequency and voltage regulation
 - Remote HMI 112 (with 25-foot harness) included in standard generator set (GenSet) shipment allows for control flexibility
- Low-cost, easy installation:
 - Standard down exhaust tube with 90° exhaust elbow option included in standard GenSet shipment for alternative exhaust options
 - Pre-plumbed fuel fittings and pre-wired battery connections
- User-friendly service and maintenance access:
 - Unrestricted right-side service for all maintenance items
 - Top and side oil fill locations
- Low vibration for smooth operation
- Optional lock-in-place mounting slides for customizable operation and service
- Optional weather-protective enclosure

Model*	Fan	Watts	Voltage	Amps	PF	Phase	Circuit breaker
CM20-1	Pusher	20,000	120/240	83	1.0	1	(1) 2-pole, 100 A
CM20-2			120/208	69	0.8	3	(1) 3-pole, 100 A
CM20-3			277/480	30	0.8	3	(1) 3-pole, 100 A
CM25-1		25,000	120/240	104	1.0	1	(1) 2-pole, 100 A
CM25-2			120/208	87	0.8	3	(1) 3-pole, 100 A
CM25-3			277/480	38	0.8	3	(1) 3-pole, 100 A

*EPA-certified for mobile applications, only.

Engine specifications

Base engine	Kubota V2403-CR-TIE4BG
Design	4-cycle, liquid-cooled diesel engine
Displacement	2434 in ³ (149 cm ³)
Power	48.9 hp @ 1800 rpm
Cylinder block configuration	4, inline vertical
Fuel injection pump	Bosch
Starting voltage	12 V
Cooling system capacity	2.75 gal. (10 L)
Lube oil capacity	10 qt (9.5 L)

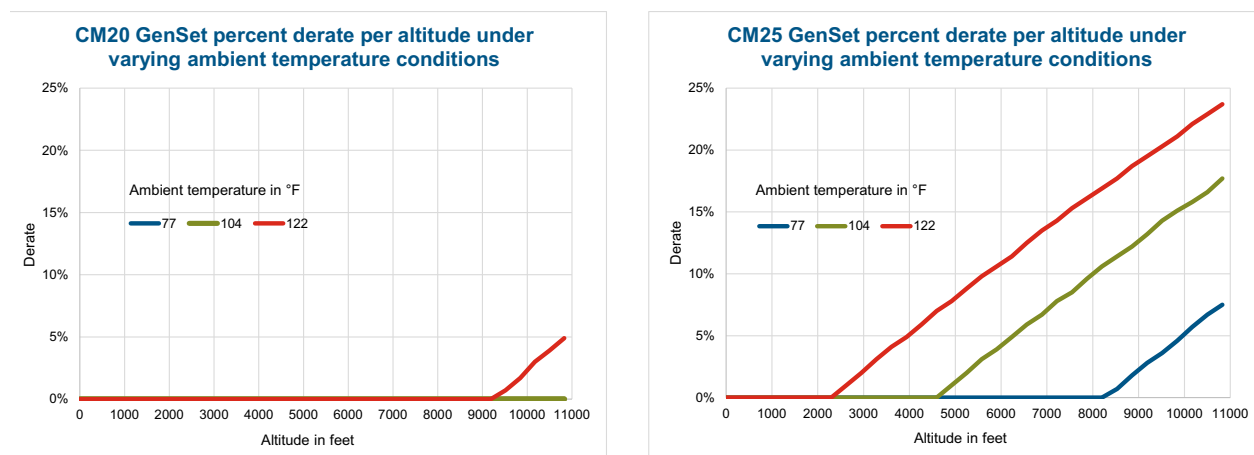
Alternator specifications

Design	Cummins, brushless, drip proof construction
Bearings	Double-sealed, pre-lubricated ball bearing
Insulation system	Class H per NEMA MG1-1.65 and BS 2757
Standard temperature rise	125 °C
Exciter type	Electronic voltage regulation
Alternator cooling	Direct-drive centrifugal blower
Damper bar system	Low harmonic waveform distortion

Fuel consumption

	No. 2 diesel fuel consumption gph (L/hr)			
	25% load	50% load	75% load	Full load
CM20-1	0.44 (1.67)	0.88 (3.33)	1.31 (4.96)	1.75 (6.62)
CM20-2	0.44 (1.67)	0.88 (3.33)	1.31 (4.96)	1.75 (6.62)
CM20-3	0.44 (1.67)	0.88 (3.33)	1.31 (4.96)	1.75 (6.62)
CM25-1	0.55 (2.08)	1.09 (4.13)	1.64 (6.2)	2.18 (8.25)
CM25-2	0.55 (2.08)	1.09 (4.13)	1.64 (6.2)	2.18 (8.25)
CM25-3	0.55 (2.08)	1.09 (4.13)	1.64 (6.2)	2.18 (8.25)

GenSet derates



NOTE: For altitudes up to 11,000 feet, the derates for the CM20 at 77 °F and 104 °F are negligible.

PowerCommand 1.1 control system

The PowerCommand Control (PCC) is an integrated GenSet control system providing voltage regulation, engine protection, operator interface and isochronous governing (optional). The integration of all functions into a single control system provides enhanced reliability and performance compared to conventional GenSet control systems. Prototype tested; UL, CSA, and CE compliant. The PCC system includes:



Environment

- Ambient operating temperature from: -40 to +70 °C (-40 to 158 °F) HMI from -20 to +70 °C (-4 to 158 °F)
- Operating altitude up to 4000 m (13,000 ft)

Features

- Control boards potted for environmental protection
- InPower PC-based service tool available for detailed diagnostics
- Battery monitoring and testing features and smart starting control system

AC protection

- Field overload
- Over current warning and shutdown
- Over and under voltage shutdown
- Over and under frequency shutdown
- Over excitation (loss of sensing) fault
- Integrated digital electronic voltage regulator

Digital voltage regulation

- Configurable torque matching
- Integrated digital electronic voltage regulator

Alternator data

- 60 Hz frequency
- Three-phase AC current
- AC: Single or three-phase line-to-line or line-to-neutral
- Digital output voltage regulation within +/-10% any loads between no load to full Drift equals no more than +/-10% for 40 °C (104 °F) temperature change in eight hours

Engine data

- DC voltage battery charge
- Lube oil pressure

Control functions

- Cycle cranking
- Configurable input (1)
- Configurable output (1)
- Time delay start and cooldown

Engine protection

- Cranking lockout
- Overspeed shutdown
- Fail to start (overcrank) shutdown
- Fail to crank shutdown
- Low fuel level warning or shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown
- Low coolant level warning or shutdown
- Low coolant temperature warning
- High, low, and weak battery voltage warning

Operator/display panel

- Manual off switch
- Optional remote operator panel (HMI)

Other display data

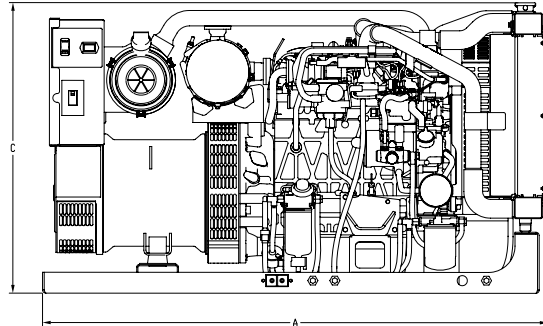
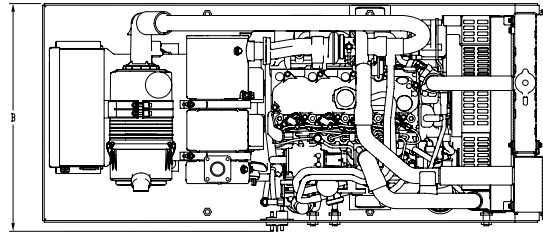
- Fault history
- Start attempts, starts, running hours
- Data logging and fault simulation (requires InPower service tool)

Dimensions

This outline drawing is for reference only.
Do not use for installation design.

	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)
Open set	1467 (58)	658 (26)	868 (34)
Closed set	1499 (59)	686 (27)	889 (35)

NOTE: Consult drawings for applicable weights. Contact the factory for additional information.



Options

Lock-in-place mounting slides

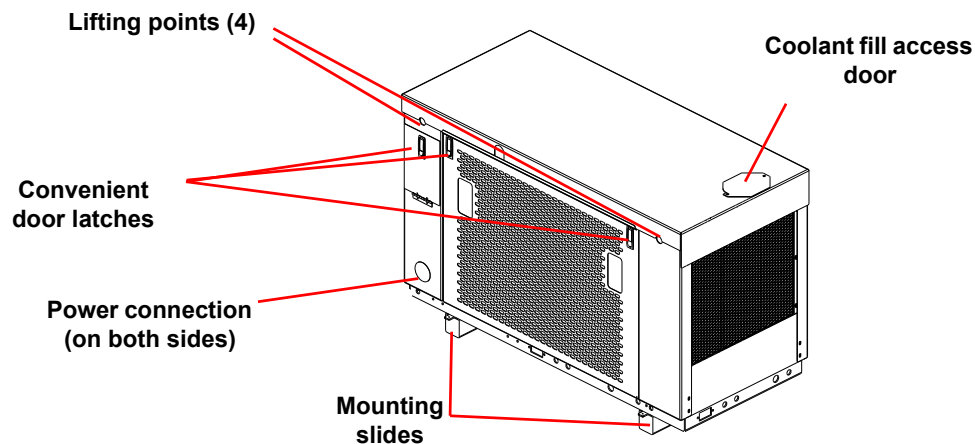
For increased ease of use and convenience, Cummins can provide mounting slides that:

- Offer affordable, bottom mount, side-to-side, extra heavy-duty solid stainless steel construction
- Extend to width of GenSet, with an additional height of 3.5"
- Incorporate solid rollers for vertical alignment and ball bearings for horizontal thrust
- Lock at fully closed and fully extended positions
- Ship loose for easy on-site installation (GenSet base prepared for installation)

Enclosure

Cummins provides the option of protecting your GenSet with a black protective steel enclosure to protect the GenSet from harsh weather conditions. These enclosure kits are designed to enclose the entire GenSet while allowing ample air flow for cooling. The enclosure includes:

- Easy service access with convenient, removable panels
- Protection from climate conditions (weather-protective (F001-WPE) designation appropriate for applications where sound reducing enclosures are not required)
- Quality construction of 12-gauge, low carbon, hot-rolled ASTM A1011 steel



After sales support

Cummins GenSets are supported by the largest and best-trained worldwide-certified distributor/dealer network in the industry. This network of knowledgeable Cummins distributor/dealers will help you select and install the right GenSet and accessories to meet the requirements of your specific application. This same network offers a complete selection of commonly-used GenSet maintenance parts, accessories, and products, including Specification Sheets and manuals. Our trained professionals can answer your questions regarding proper installation, operation, maintenance, and more.

Warranty

Warranty covers all aspects of the GenSet (except routine maintenance) for one year - or the first 2000 hours of operation - whichever occurs first.

Applicable codes and standards

US EPA Tier 4 certified for mobile applications

ISO 9001:2015

This product has been manufactured under the controls established by an approved management system that conforms with ISO 9001:2015.

Specifications are subject to change without notice.

Power You Can Rely On

To order, contact kristin.m.schmitt@cummins.com.
Visit power.cummins.com to view all your power solutions.

