



# RAILWAY COMPRESSORS

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1 - 100 HP | 1.9 - 218 CFM

# Products for **Electric Locomotive**



## TRC 1000 MN-UG

### Features

W type configuration, three cylinder, two-stage, oil-splash lubricated, air-cooled and direct coupled.

### Technical Specification

<b>Free Air Delivery</b>	<b>: 1000 lpm (35.31 cfm)</b>
<b>Working Pressure</b>	<b>: 10.5 Kg/cm<sup>2</sup></b>
<b>Overall Dimension (L x B x H)</b>	<b>: 1120 x 770 x 925 mm</b>
<b>Weight</b>	<b>: 450 Kg ( approx.)</b>

### Key features

- Upgraded version of TRC1000MN
- Robust in design with enhanced performance and less maintenance
- These compressors are used in conventional loco model WAP4, WAG5 and WAG7 locomotives manufactured by Chittaranjan Locomotives Works, Chittaranjan & BHEL, Jhansi
- Unique 'Disc Type Coupling' arrangement which requires very less attention and can take larger misalignment
- Efficient air filtration system ensures higher compressor efficiency and low noise level



## RR 20100 CG (M)

### Features

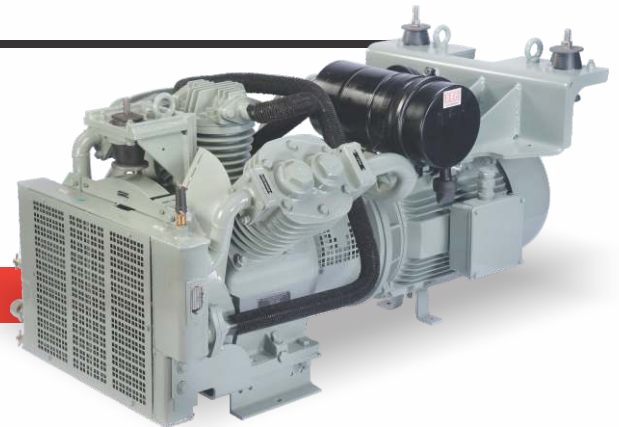
W type configuration, three cylinder, two-stage, oil splash lubricated, air-cooled, direct coupled and underslung mounting. onboard variants available

### Technical Specification

<b>Free Air Delivery</b>	<b>: 1750 lpm (61.80 cfm)</b>
<b>Working Pressure</b>	<b>: 10.2 Kg/cm<sup>2</sup></b>
<b>Overall Dimension (L x B x H)</b>	<b>: 1450 x 871x 768 mm</b>
<b>Weight</b>	<b>: 675 Kg ( Approx.)</b>

### Key features

- These compressors are meant for new generation 3 - phase locomotives model WAG9 and WAP5, WAP7 manufactured by Chittaranjan Locomotives Works, Chittaranjan
- Unique underslung mounting design for locomotives
- Customer friendly, adopted flange type joints and easy access suction filters
- Improved design to meet railway reliability maintenance cycle
- Meeting additional air requirement of air spring suspension system introduced in high speed trains Duranto & Rajdhani



**Electric Locomotive**



# New Products for **Electric Locomotive**

RR20100CC



## Features

Oil Free, W type configuration, three cylinder, two-stage, air-cooled and direct coupled.

## Technical Specification

<b>Free Air Delivery</b>	<b>: 2000 lpm ( 71.0 cfm)</b>
<b>Working Pressure</b>	<b>: 10.2 Kg/cm<sup>2</sup></b>
<b>Overall Dimension (L x B x H)</b>	<b>: 1434 x 663 x 702 mm</b>
<b>Weight</b>	<b>: 430 Kg ( Approx.)</b>

## Key features

- These compressors are meant for new generation 3 - phase locomotives model WAG9 and WAP5, WAP7 manufactured by Chittaranjan Locomotives Works, Chittaranjan
- Unique underslung mounting design with wire rope isolator
- Customer friendly, adopted flange type joints and easy access suction filters
- Improved design to meet railway reliability maintenance cycle
- Meeting additional air requirement of air spring suspension system introduced in high speed trains Duranto & Rajdhani

## RR 20100 OF (M)

**OilFREE™**  
CLASS-0 ISO 8573-1

## Features

Oil free, W type configuration, three cylinder, two-stage, air-cooled, direct coupled, underslung & onboard variants available

## Technical Specification

<b>Free Air Delivery</b>	<b>: 1750 lpm (61.80 cfm)</b>
<b>Working Pressure</b>	<b>: 10.5 Kg/cm<sup>2</sup></b>
<b>Overall Dimension (L x B x H)</b>	<b>: OF(M) usl :1290 x 695 x 765 mm</b> <b>OF(M) ob :1170 x 695 x 798 mm</b>
<b>Weight</b>	<b>: 520 Kg ( Approx.)</b>

## Key features

- 100% oil free reciprocating air compressor
- PTFE coated & PTFE piston rings to ensure longer wear life
- No lubrication required for pistons and cylinders
- Efficient cooling ensure temperature rise 20°C above ambient
- Reduce overall maintenance cost and environmental friendly air compressor



New Electric **Locomotive**



# Products for **Electric Multiple Unit**



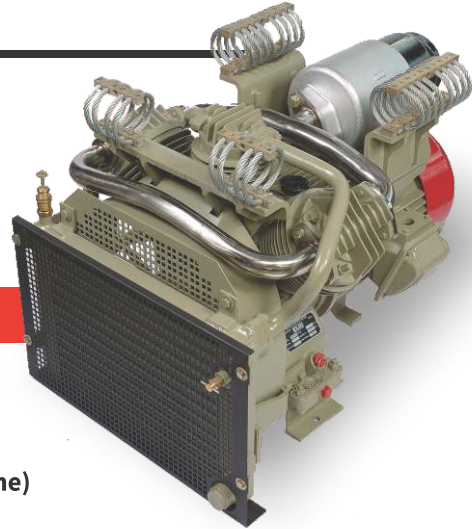
## RR 15070

### Features

W-type configuration, three cylinder, two-stage, oil splash lubricated, air-cooled and underslung mounting

### Technical Specification

<b>Free Air Delivery</b>	<b>: 1200 lpm (42.37 cfm)</b>
<b>Working Pressure</b>	<b>: 7 Kg/cm<sup>2</sup></b>
<b>Overall Dimension (LxBxH)</b>	<b>: 1470 x 710 x 690mm</b>
<b>Weight</b>	<b>: 340 Kg (Approx - with mounting frame)</b>



### Key features

- This is the first 'W' shape design air compressor developed for EMU's and MEMU's
- Higher output for air spring suspensions and automatic doors
- Under slung mounting design along with wire rope isolators
- Introduced latest innovative design of 'Hollow rotor shaft' for motor, which eliminates conventional coupling
- Less weight and compact design

## TRC 1000 DCM

### Features

Inline configuration, three cylinder, two-stage, forced lubrication, air-cooled and direct coupled

### Technical Specification

<b>Free Air Delivery</b>	<b>: 1100 lpm (38.84 cfm)</b>
<b>Working Pressure</b>	<b>: 7 Kg/cm<sup>2</sup></b>
<b>Overall Dimension (L x B x H)</b>	<b>: 1245 x 590x 510 mm</b>
<b>Weight</b>	<b>: 405 Kg (Approx.)</b>

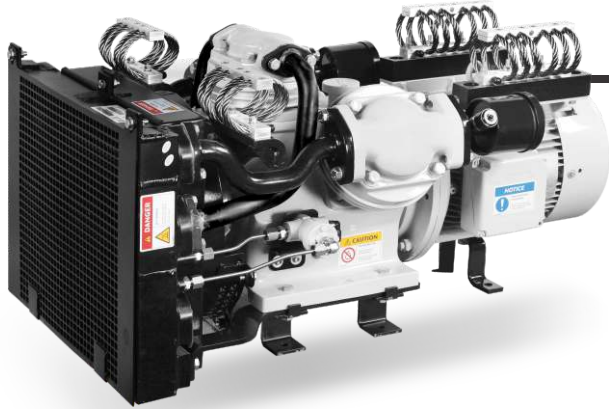
### Key features

- Compact and robust in design
- Positive lubrication through 'Oil Pump'
- Provided with magnetic drain plugs to attract iron particles in the lubricating oil to provide purified lube oil



**Electric Multiple Unit**

# New Products for **Electric Multiple Unit / Metro**



RR 10100 OF

**OilFREE™**  
CLASS-0 ISO 8573-1

## Features

Oil free, W type configuration, three cylinder, two-stage, air-cooled, direct coupled and underslung.

## Technical Specification

Free Air Delivery	: 900 lpm (32 cfm)
Max. Working Pressure	: 10.5 Kg/cm <sup>2</sup>
Overall Dimension (L x B x H)	: 946 x 520 x 463 mm
Weight	: 185 Kg ( Approx.)

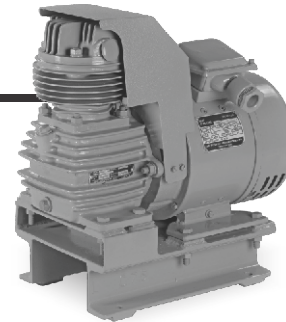
## Key features

- 100% oil free reciprocating air compressor
- PTFE coated & PTFE piston rings to ensure longer wear life
- No lubrication required for pistons and cylinders
- Efficient cooling ensure temperature rise 20° ambient
- Reduce overall maintenance cost and environmental friendly air compressor

## CRC 150

### Features

Mono-block vertical configuration, single cylinder, single-stage, oil splash lubricated and air-cooled.



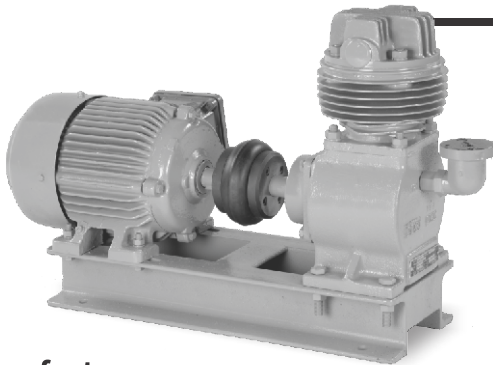
### Technical Specification

Free Air Delivery	: 100 lpm (3.53 cfm)
Working Pressure	: 8 Kg/cm <sup>2</sup>
Overall Dimension (L x B x H)	: 450 x 235 x 440 mm
Weight	: 55.5 Kg ( Approx.)

### Key features

- Onboard / under slung mounting
- Small footprint
- Easy to mount on locomotives and EMUs
- Lifts the pantograph efficiently
- Operates at 110V DC power supply

## WRA-AC / DC (Water Raising Apparatus)



### Key features

- Highly reliable for raising water in coaches
- Light in weight and compact

### Features

Mono-block vertical configuration, single cylinder, single-stage, oil splash lubricated, air-cooled and direct coupled

### Technical Specification

Free Air Delivery(@1200 rpm)	: 55 lpm (1.94 cfm)
Working Pressure	: 1.75 Kg/cm <sup>2</sup>
Overall Dimension (L x B x H)	: 640 x 285 x 410 mm
Electric Supply	: 415 V, 3 Phase, 50 Hz
Weight	: 45.5Kg ( Approx.)

New Electric Multiple Unit / Metro





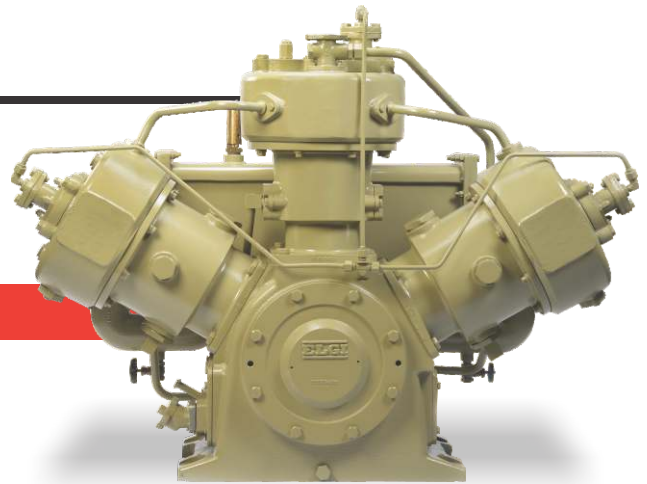
# Products for Diesel Locomotive



## RR66101 W

### Features

W-type configuration, three cylinder, two-stage, forced lubrication, water-cooled and direct coupled coupled.

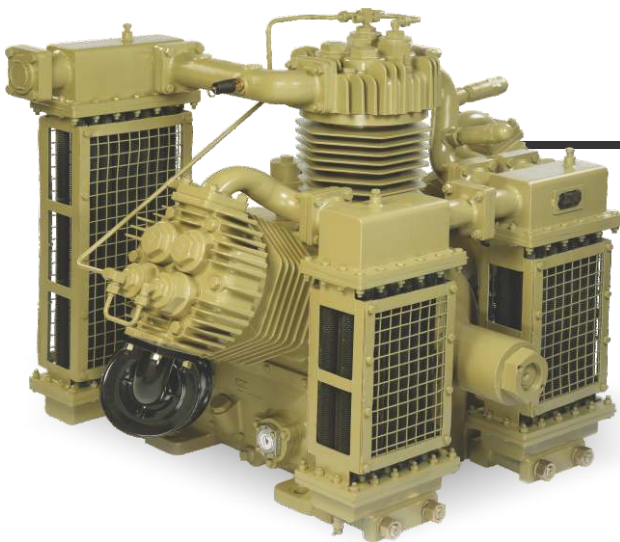


### Technical Specification

<b>Free Air Delivery</b>	: 5667 lpm (200 cfm)
<b>Working Pressure</b>	: 10 Kg/cm <sup>2</sup>
<b>Overall Dimension (L x B x H)</b>	: 1368 x 662 x 1060 mm
<b>Weight</b>	: 710 Kg (Approx.)

### Key features

- First indigenous 'Water Cooled' design compressor for Indian Railways
- Meets air requirement of GM locomotives WDP4 and WDG4 built by Diesel Locomotives Works, Varanasi.
- Improved crankshaft design for better impact resistance and strength
- Convenient float type 'oil level indicator' and dip stick arrangement
- High sump capacity ensures improved ergonomics & maintenance schedule
- Effective heat transfer through 'Shell & Tube' cooling arrangement
- Less vibration



## RR 80101

### Features

W-type configuration, three cylinder, two-stage, forced lubrication, air-cooled and direct coupled.

### Technical Specification

<b>Free Air Delivery</b>	: 5667 lpm (200 cfm)
<b>Working Pressure</b>	: 10 Kg/cm <sup>2</sup>
<b>Overall Dimension (L x B x H)</b>	: 1315 x 1374 x 1015 mm
<b>Weight</b>	: 750 Kg (Approx.)

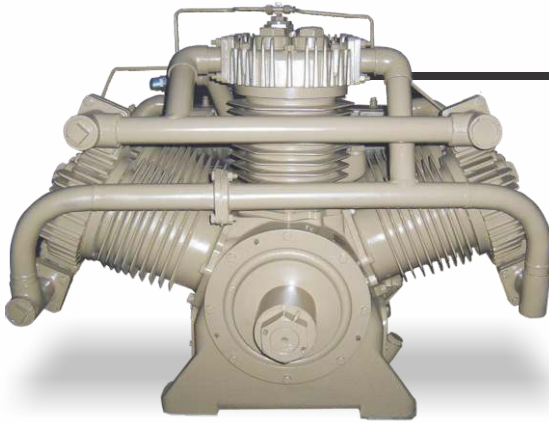
### Key features

- Upgraded version of LG3 CDB for higher reliability and low life cycle cost
- Designed to meet the latest maintenance schedule requirement of Indian Railways of M24
- Introduced Hexagonal deep dense finned cylinders for better heat dissipation
- Compact breather
- Positive locking arrangement for counter weight in crankshaft



**Diesel Locomotive**

# RR 100101 EC (Expressor)



## Features

W-type configuration, three exhauster cylinders - single stage, three compressor cylinders - two stage, forced feed oil lubricated, air-cooled and direct coupled

## Technical Specification

<b>Free Air Delivery</b>	<b>: 6173 lpm (218 cfm)</b>
<b>Working Pressure</b>	<b>: 10 Kg/cm<sup>2</sup></b>
<b>Vacuum Displacement</b>	<b>: 13.045 m<sup>3</sup>/min</b>
<b>Vacuum</b>	<b>: 23" Hg</b>
<b>Overall Dimension (L x B x H)</b>	<b>: 1207 x 1374 x 1010 mm</b>
<b>Weight</b>	<b>: 1135 Kg ( Approx.)</b>

## Key features

- Upgraded version of 6CD 3UC for higher reliability and low life cycle cost
- Latest design for enhance performance parameter
- Less maintenance cost
- Aerodynamically designed Fan guard for higher air flow
- Special design 'Split-type' inter cooler for better heat dissipation and easy serviceability

# TRC 1000 B

## Features

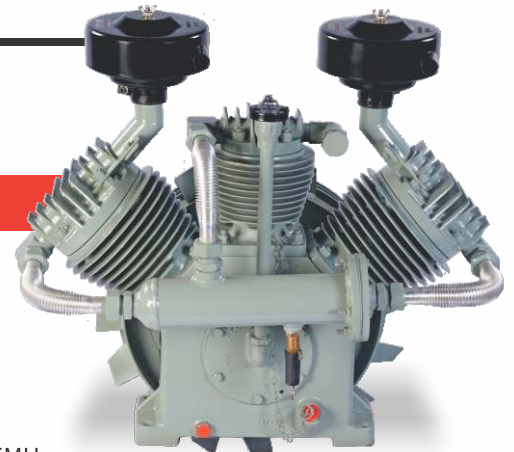
W-type configuration, three cylinder, two-stage, splash lubrication, air-cooled, V-belt drive

## Technical Specification

<b>Free Air Delivery</b>	<b>: 1000 lpm (35.3 cfm)</b>
<b>Working Pressure</b>	<b>: 8 Kg/cm<sup>2</sup></b>
<b>Overall Dimension (L x B x H)</b>	<b>: 785 x 520 x 810 mm</b>
<b>Weight</b>	<b>: 125 Kg ( Approx.)</b>

## Key features

- This compressor is specially developed for Shunting Locomotives WDS6 & DEMUs
- Special design 'Oil Bath' air suction filters, which provides dust free suction air
- Suited for either direction of rotation i.e. clockwise or anticlockwise
- Flexible V- belt drive system on locomotives



# TRC 2507

## Technical Specification

<b>Free Air Delivery</b>	<b>: 2600 lpm ( 91.82 cfm)</b>
<b>Working Pressure</b>	<b>: 7 Kg/cm<sup>2</sup></b>
<b>Overall Dimension (L x B x H)</b>	<b>: 820 x 670 x 855 mm</b>
<b>Weight</b>	<b>: 290 Kg ( Approx.)</b>

## Key features

- This compressor is used in Diesel Electric Multiple Unit (DEMU)
- Suited for either direction of rotation i.e. clockwise or anticlockwise
- Dynamically balanced, less vibration
- Highly volumetric efficiency

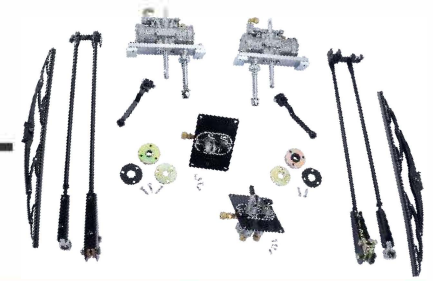
## Features

V-type configuration, two cylinder two-stage, splash lubrication, air-cooled and V-belt drive

**Diesel Multiple Unit / Shunting**



# Railway Wiper



## Technical Specification

Locomotive Segment	Locomotive type	Wiper Model	Wiper Contact Type	Pattern	Max. blade length	Working pressure kg/sq.cm		Strokes per min @ 7kg/sq.cm
					(mm)	Min	Min	
Electric Loco	Conventional	WP 9038 E1	Single	Radial	300	2.5	10	>60
	Conventional	WP 9038 E2	Multiple	Radial	300	2.5	10	>60
	3 - Phase	WP 6560 E3	Multiple	Panto	508	3	11.5	35 to 55
Diesel Loco	ALCO	WP 10535 D1	Single	Radial	180	3	10	>60
	ALCO	WP 10535 D2	Single	Radial	300	3	10	>60
	ALCO after 2004	WP 3860 D3	Multiple	Panto	457	3	11.5	69 to 75
	GM (Window side)	WP 7560 D4	Multiple	Panto	457	3	10	69 to 75
	GM (Door side)	WP 4060 D5	Multiple	Panto	457	3	10	69 to 75
EMU	Old ICF rakes	WP 6538 U1	Multiple	Panto	508	2.5	10	>60
	New ICF rakes	WP 6545 U2	Multiple	Panto	508	3	10	40 to 60
	MRVC	WP 8545 U3	Multiple	Panto	508	3	11.5	35 to 55
	Jessop	WP 8045 U4	Multiple	Panto	508	3	11.5	35 to 55

# Railway Horn



## Technical Specification

Locomotive Segment	Horn Model	Horn Type	Sound level @ 5m with 7kg.sq.cm	Working pressure kg/sq.cm		No. of cones Nos
			dBa	Min	Min	
EMU/ Diesel	HAHT	Single tone / High	>115	3	10	1
EMU/ Electric	HALT	Single tone / low	>115	3	10	1
ALCO	HADT	Dual tone	120 to 125	3	10	2
GM	HAAW	Air whistle	120 to 125	3	10	2

# ELGI

**ELGI EQUIPMENTS LIMITED**

CORPORATE OFFICE: Trichy Road, Singanallur, Coimbatore - 641005,

T: +91-422-2589555, E: enquiry@elgi.com, w: www.elgi.com

Customer care mobile no.: +91 92821 11224 (SMS only)

Toll-free no: **1800-425-3544** (applicable for India only)

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Head office: 5 Jansen Road, Witfield, Boksburg, 1459  
T: +27 (0) 11 894 2906 E: info@air-solutions.co.za

