



C O R G 0991 V01

Date : 23rd November 2022

C O R G 0991 V01

TYPE APPROVAL CERTIFICATE

Cert	Report	Specs	Drg	Total
02	-	77	11	90 pgs

FOR

Retro-fit Emission Control Devices (RECD) Compliance

1. Based on the verification of documents & trials conducted on RECD model "Chakr Shield 2.0" (Family designation C1-R5) for below mentioned manufacturer and it is certified that the following RECD model complies with the provisions of Type Approval of CPCB System Procedure for Retro-fit Emission Control Devices (RECD) Compliance to Diesel Power Generating Set Engines Up to Gross Mechanical Power 800 kW, as per NGT Order/report "Report filed in O.A. No. 681/2018 dated 6.08.2019".

Documental Reference		RECD Manufacturer		
CORG 0991 dtd. 27.09.2022		M/s.Chakr Innovation Pvt Ltd S.NO 236,Hissa No.7 & S.NO 237, Taluka Mulish, Hinjewadi, Phase 1, Pune - 411 057, Maharashtra Plant : Hinjewadi, Pune		
RECD Family Designation		Engine Manufacturer		RECD Model
C1-R5		M/s. Cummins India Limited		Chakr Shield 2.0
Tested Engine Model			Engine Cubic Capacity	Gross Engine Power
6BTAA5.9 GI-1			5883 cm ³	112 kW @ 1500 rpm
Engine Baseline emissions	CPCB Stage -1	Class of RECD	Class II	Engine Manufacturing Date
				November 2007
Base Engine Type Approval Certificate number			ARAI/MOEF/DGTA/CIL-F18/2004-56	
The above mentioned RECD model is applicable for Phase I Certified Diesel Generator Engine (s)				Refer ANNEXURE-I

2. Validity of the Certificate

This Type Approval Certificate is valid for Genset engine CPCB Stage -1 effective from 01-07.2007 to 01.07.2014 , and in addition to	a.	As per System and procedure for Emission Compliance of Retro-fit Emission Control Devices(RECD) for Diesel Power Generating Set Engines up to Gross Mechanical power 800kW as per NGT Order/report "Report filed in O.A. No. 681/2018 dated 06.08.2019 or until further amendment in the MoEFCC rule, whichever is earlier.
	b.	No change in specified RECD technical specification.

3. It is certified that the above RECD Model comply with the emission limits applicable for Retro-fit Emission Control Devices (RECD) to Diesel Power Generating Set Engines Up to Gross Mechanical Power 112 kW, as prescribed under the following rules, notified by Ministry of Environment, Forest and Climate Change (MoEFCC), Govt. of India:

Rule No.	Description	Date
CPCB-PCLS/12/2021-22	System and procedure for Emission Compliance of Retro-fit Emission Control Devices(RECD) for Diesel Power Generating Set Engines up to Gross Mechanical power 800kW as per NGT Order/report "Report filed in O.A. No. 681/2018 dated 06.08.2019	30.12.2021

4. COP : COP shall be completed by 30.06.2023 as per CPCB Procedure, for details refer COP-Annexure.

Please turn over for Disclaimer

AUTHORISED SIGNATORY		
 VIJAYANTA AHUJA DEPUTY GENERAL MANAGER	 PAMELA TIKKU DIRECTOR (Offg.)	 Page 1 of 2