



C O T G 0021

Date : 06<sup>th</sup> February 2024

C OTG0021

# TYPE APPROVAL CERTIFICATE

FOR

Retro-fit Emission Control Devices (RECD) Compliance

Cert	Report	Specs	Drg	Total
06	12	129	16	163 pgs



1. Based on the verification of documents & trials conducted on RECD model "C2-CS1800-R12" (Family designation C2-R12) 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			
Current Certificate		M/s Chakr Innovation Pvt. Ltd. Survey No. 236, Hissa No. 7 and Survey No. 237 Hinjewadi, Taluka Mulshi, Pune, Maharashtra - 411057 Plant : Hinjewadi, Pune			
RECD Family Designation		Engine Manufacturer		Tested Engine Model	
C2-R12		M/s Cummins India Limited		KTA-38-G2-I	
RECD Model			Engine Cubic Capacity	Gross Engine Power	
C2-CS1800-R12			38000 cm <sup>3</sup>	664 kW @ 1500 rpm	
Engine Baseline emissions	CPCB Stage -I	Class of RECD	Class II	Engine Manufacturing Date	September 2007
S. No.	Item Description	Parent RECD Type			
		Annexure-II			
		Annexure-III			
		Annexure-III			

2. Validity of the Certificate




This Type Approval Certificate is valid for Genset engine CPCB Stage -I effective from 01.07.2004 to 30.06.2014.	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 (Details listed in Annexure-II) comply with the emission limits for Retro-fit Emission Control Devices (RECD) to Diesel Power Generating Set Engines having Gross Mechanical Power 499.3kW to 663.6kW, 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 6.08.2019	01.02.2022

4. COP : COP shall be completed by 30.06.2024 as per CPCB Procedure, for details refer COP Annexure-I.

## AUTHORISED SIGNATORY

 <b>SITARAM KASHYAP</b> DEPUTY GENERAL MANAGER	 <b>SAURABH DALELA</b> DIRECTOR	 Page 1 of 6
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