

C O S G 0504 V01

∞€.O.S.G0504V01

TYPE APPROVAL CERTIFICATE

FOR

 Date :
 12th May 2023

 Cert
 Report
 Specs
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Retro-fit Emission Control Devices (RECD) Compliance

1. Based on the verification of documents & trials conducted on RECD model "Chakr Shield 2.0_C2-CS1800-R10-V2" (Family designation C2-R10) 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".

Generating Set Engines Up to Gross Mechanica	l Power 800 kW, as per NGT Order/rep	ort "Report filed in O.A. No. 681/2018 dated 6.0	08.2019",			
Documental Reference	RECD Manufacturer					
, w 46319	M/s. Chakr Innovation Pvt Ltd. 9					
COSG 0504 dtd. 10.05.2023	S.NO 236,Hissa No.7 & S.	NO 237, Taluka Mulish, Hinjewa	di, Phase 1, Pune - 411 057, Maharashtra			
Strong Michael Strings	Plant : Hinjewadi, Pune	, Kel Estio	the biog, tollowing of CS fg.			
RECD Family Designation	Engine	Manufacturer	RECD Model			
C2-R ₁ 0° C2-R ₁	M/s. C	aterpillar Inc. 30 The Control of th	Chakr Shield 2.0_C2-CS1800-R10-V2			
Tested Engi	ne Model	Engine Cubic Capacity	Gross Engine Power			
C15-20	SP-1 Applored ijes vi	15200 cm ³	454 kW @ 1500 rpm			
Engine Baseline emissions CPCB Stage	-II Class of Class	II Engine Manufacturing Date	September 2017			
S No. Itam Decemention	Parent RECD Type RECD types within		the RECD family (if applicable)			
S. No. Item Description	Type 1	Type 2 Type 3	Type 4 Type 5 Type 6			
CRCL EMILL.	69104 O.K.101	Annexure-II	Mey Base be			
RECD suitable for Phase II Cert	tified Diesel Generator en	gine / engine famillies	Annexure-III			
V-11-120, -f 41 00f14-	V. 90	U'				

2. Validity of the Certificate

This Type Approval Certificate is valid for Genset engine CPCB Stage -II effective from 01.07.2014 to 30.06.2023.

As per System and procedure for Emission Compliance of Retro-fit Emission Control Devices(RECD) for Diesel Power Generationg 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 454 kW, as prescribed under the following rules, notified by Ministry of Environment, Forest and Climate Change (MoEFCC), Govt. of India:

Rule No.	Description	Date
FCD YOGUM	System and procedure for Emission Compliance of Retro-fit Emision Control Devices(RECD)	CV
CPCB-PCLS/12/2021-22	for Diesel Power Generationg Set Engines up to Gross Mechanical power 800kW as per NGT	01.02.2022
ed scallol.	Order/report "Report filed in O.A. No. 681/2018 dated 6.08.2019	K Shire

4. COP: COP shall be completed by 30.06.2024 as per CPCB Procedure, for details refer COP Annexure-1.

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c	SITARAM KASHYAP	* MANESAR *	- /,	JŠUDAN JOSHI	Page 1 of
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