

COP Annexure-I

Criteria*	COP Required
RECD Manufacturer/Importer/Retrofitter	RECDs fitted on engines of all ratings shall be subjected to the verification of CoP once for every 500 units per family or once a year, whichever is earlier Wherever applicable, RECDs fitted on engines of all ratings of engines shall be subjected to the verification of PCD once every CoP-year by PCD family (ies) representative RECD(s). Such demonstration is PCD family dependent and irrespective of combined volumes produced and sold under such family (ies)

* As Applicable

Annexure-II

S No	Item Description	Parent RECD Type
		Type 1
1	Manufacturing Plant address	M/s JBDS Power Project International Pvt. Ltd., CCI Industrial Park, Tauru Road, Bilaspur Kalan, Gurgaon, Haryana-122413
2	Manufacturer's trade name or mark	M/s JBDS Power Project International Pvt. Ltd.
3	RECD family designation	JBDS_R1
4	RECD type/model designation	JBDS_112_00_000
5	RECD Category (Domestic/Imported)	Domestic
6	Class of RECD	Class II
7	Type Identification of the RECD	Continuous
8	Location of type ID marking	Refer Specification no. JBDS-RECD-PP04/1-REV-00 dtd. 03-02-2025 Clause no 1.8
9	Identifying part number(s) of the RECD	JBDS112
10	Engine/ Engine Family for which the RECD is intended (application range)	Tested Engine Model: QSB5.9-G1 & 4BTAA3.3-G11 Application Range: 25.13kW to 137.2kW (Refer Annexure-III)
11	PM Reduction Efficiency of the RECD	89.47%
12	Designed for fitment to an engine meeting the emissions requirements of (Regulation and Stage):	CPCB Stage -II
ICAT Ref No.		2024-2061; IOCS No: 184357
Base Engine Type Approval		ARAI/MOEF/DGTA/CILP-F40/2014-21
Certificate number		ARAI/MOEF/DGTA/CILC-F48/2014-16
Test Report Reference		CT0EU 0214 dt.15/04/2025
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SITARAM KASHYAP DEPUTY GENERAL MANAGER		SAURABH DALELA DIRECTOR

Annexure-III

List of applicable engine(s) as per 771(E) dtd. 11.12.2013 and GSR 232(E) dtd. 31.03.2014 Phase II certified In -Use DG sets for corresponding RECD models of RECD Family.

S. No.	Manufacturer Name & Address	Engine Family	Engine Model	Rated Gross Mechanical Declared Power	Type Approval Certificate Number
1	Ashok Leyland Ltd., No.1, Sardar Patel Road, Guindy, Chennai - 6000032	F24	AL4CTIDG2	59 kW	ARAI/MoEF/DGTA/ALL-F24/2014- 01-E1 Dated: 26-Jul-2014
2	Ashok Leyland Ltd., No.1, Sardar Patel Road, Guindy, Chennai - 6000032	F25	AL4CTIDG3	78 kW	ARAI/MoEF/DGTA/ALL-F25/2014- 02-E1 Dated: 26-Jul-2014
3			AL4CTIDG4	94 kW	
4			AL6DTIDG1	94 kW	
5			AL6DTIDG2	116 kW	
6			AL6DTIDG3	130 kW	
7	Ashok Leyland Ltd., No.1, Sardar Patel Road, Guindy, Chennai - 6000032	F38	AL4CTIDG5	59 kW	ARAI/MoEF/DGTA/ALL-F38/2015- 09-E1 Dated: 16-January-2020
8			AL4CTIDG6	39 kW	
9	Ashok Leyland Ltd., No.1, Sardar Patel Road, Guindy, Chennai - 6000032	F31	AL4CTDG1	39 kW	ARAI/MoEF/DGTA/ALL-F31/2014- 03-E1 Dated: 26-Jul-2014
10	Ashok Leyland Ltd., No.1, Sardar Patel Road, Guindy, Chennai - 6000032	F50	AL6DTIDG6	116 kW	ARAI/MoEF/DGTA/ALL-F50/2022- 19 Dated: 03-February-2022
11	Cooper Corporation Pvt. Ltd, Plot no. M60-1, Engine Division Post- Kodoli, Addl. MIDC Satara, 415003	F12	3B5D1C62IW	62 kW	ARAI/MoEF/DGTA/CCPL- F12/2017-05 Dated: 23-Jun-2017
12			3B5D1C52IW	52 kW	
13	Cooper Corporation Pvt. Ltd, Plot no. M60-1, Engine Division Post- Kodoli, Addl. MIDC Satara, 415003	F10	3B5D1C85RW	85 kW	ARAI/MoEF/DGTA/CCPL- F10/2014-04- E1 Dated: 17-Aug-2015
14			4B5DIC113RW	113 kW	
15			3B5D1C75RW	75.5 kW	
16			4B5D1C100RW	100 kW	
17	Deutz Engines India Pvt. Ltd., 6, Ramabai Ambedkar Road, B Wing, 4th Floor, Heritage House, Pune 411001. Maharashtra, India	F4	TCD2013 L042V (D3UC100)	100.3 kW	ARAI/MoEF/DGTA/IMP/DEIPL- F4/2016-04 Dated: 08-June-2016
18			TCD2013 L062V (D3UC130)	130.6 kW	
19			TCD2013 L042V (D3UC85)	85.6 kW	

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Annexure-III Cont.

S. No.	Manufacturer Name & Address	Engine Family	Engine Model	Rated Gross Mechanical Declared Power	Type Approval Certificate Number
20	Cummins India Limited, Cummins India Office Campus Tower A, 5th Floor Survey No. 21, Balewadi, Pune, 411045	F48	4BTAA3.3 -G11	62.6 kW	ARAI/MoEF/DGTA/CILP-F48/2014- 16-E4 Dated: 22-Feb-2016
21	Cummins India Ltd. Kothrud, Pune 4110388	F37	X3.6TAAG1	39.14 kW	ARAI/MoEF/DGTA/CILP-F37/2014- 12-E3 Dated: 22-Feb-2016
22	Greaves Cotton Ltd. Industrial Engines Unit, Plot No.-2/A, MIDC Chikalthana, Aurangabad-431210	F63	3G11TAG24	42.3 kW	ARAI/MoEF/DGTA/GCLP- F63/2015-09-E2 Dated 19-Aug-2021
23			3G11TAG25	59 kW	
24		F101	4G11TAG26	114 kW	ARAI/MoEF/DGTA/GCLP-F101/2015-10-E3 Dated: 18-Aug-2021
25			4G11TAG25	93 kW	
26		F81	3G11TAG26	74.5 kW	ARAI/MoEF/DGTA/GCLP- F81/2015-08-E2 Dated 18-Aug-2021
27	Kirkoskar Oil Engines Ltd. Khadki, Pune	F108	HA494TCI G1	41.2 kW	ARAI/MoEF/DGTA/KOEL-F108/2014-08-E1 Dated 22-Feb-2018
28			HA694TCI G1	61 kW	
29		F111	4R1040TA G1	74.8 kW	ARAI/MoEF/DGTA/KOEL- F111/2014-11 Dated 22-Mar-2014
30		F109	3R1040TA G1	41.2 kW	ARAI/MoEF/DGTA/KOEL- F109/2014-09 Dated 22-Mar-2014
31		F123	6R1080TAG2	114.7 kW	ARAI/MoEF/DGTA/KOEL- F123/2019-26 Dated 27-Dec-2019
32		F110	4R810TA G1	61 kW	ARAI/MoEF/DGTA/KOEL- F110/2014-10-E2, Dated 28-Dec-2021
33		F112	4K1080TAG2	114.7 kW	ARAI/MoEF/DGTA/KOEL- F112/2019-25-E1 Dated 5-Jan-2021
34			4K1080TAG1	93.4 kW	
35		F113	6K 1080TA G2	147 kW	ARAI/MoEF/DGTA/KOEL- F113/2014-13-E4 Dated 01-June-2021
36			6R1080TAD	114.7 kW	
37			6R1080TA G1	128.7 kW	
38	SKL (India) Private Limited C 2117 Oberoi Garden Estate, Chandivali, Andheri, (East), Mumbai-400 072	F6	4H50TIC/3000	50.0 kW	ARAI/MoEF/DGTA/IMP/SKL- F6/2015-01-E1 Dated 3-Jul-2018
39	M/s. Harison Generators Private Limited, No. E-17, Focal Point, Industry Area, Patiala, Punjab-147001	F-12- ZLD	4K41LD	74 kW	ICAT/MoEFCC/DGTA/ IMP/HGPL-F-12-ZLD/P-0791 dt. 22.06.2020
40	Mahindra & Mahindra Ltd. Implementation division, MIDC, Hingna Road, Nagpur - 440 016	F45	41035GM-C2	68.9 kW	ARAI/MOEF/DGTA/M&M- F45/2014-08-E2 Dated 20-Nov-2017
41		F65	4725 GMAC2	48.12 kW	ARAI/MoEF/DGTA/M&M- F65/2016-11 Dated 6-Jul-2016

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S. No.	Manufacturer Name & Address	Engine Family	Engine Model	Rated Gross Mechanical Declared Power	Type Approval Certificate Number
42	Mahindra & Mahindra Ltd. Implementation division, MIDC, Hingna Road,Nagpur - 440 016	F66	4905 GMAC2	60.2 kW	ARAI/MoEF/DGTA/M&M- F66/2016-12 Dated 6-Jul-2016
43		F89	41125AGM-C2	74.5 kW	ARAI/MoEF/DGTA/M&M- F89/2019-20 Dated 4-Jun-2019
44	Mahindra Heavy Engines Pvt. Ltd., Plot # A-1/1, Chakan Industrial Area, Phase-IV, Village Nigoje, Chakan, Taluka- Khed Pune- 410501	F21	mPower61565G1	114.7 kW	ARAI/MoEF/DGTA/MHEL- F21/2016-05- E4 Dated 13-Nov-2017
45		F17	mPower61565G	114.7 kW	ARAI/MoEF/DGTA/MHEL- F17/2014-03- E6 Dated 17-Dec-2019
46			mPower41265G	93 kW	
47			mPower41565G	114.7 kW	
48	Tata Motors Limited, Pimpri, Pune	F33	697 TC 10	115 kW	ARAI/MoEF/DGTA/TML/- F33/2018-08- E1 Dated 29-May-2019
49			697 TC 13	93.5 kW	
50			697 TC 14	81.5 kW	
51		F24	497 TC 74	67 kW	ARAI/MoEF/DGTA/TML/- F24/2014-03 Dated 17-Jun-2014
52			497 TC 75	56.5 kW	
53			497 TC 76	47 kW	
54			497 TC 77	42 kW	
55		F25	497SP TC76	42 kW	ARAI/MoEF/DGTA/TML-F25/2016- 05 Dated 26-Aug-2016
			497sp tc 78	30 kW	
56		F27	697 TC 52	93.5 kW	ARAI/MoEF/DGTA/TML/F27/2016- 06- E1 Dated 13-Jun-2019
57			697 TC 51	81.5 kW	
58	Tata Cummins Pvt. Ltd., Telco Township, Jamshedpur, Jharkhand	F47	4BTAA3.9-G4	82 kW	ARAI/MoEF/DGTA/TCL-F47/2016- 03 Dated 29-Dec-2016
59		F40	QSB 5.9-G1	137 kW	ARAI/MoEF/DGTA/TCL-F40/2017- 07 Dated 23-Sep-2017
60		F49	6BTAA5.9-G13	119 kW	ARAI/MoEF/DGTA/TCL-F49/2019- 08- E1 Dated 26-Sep-2019
61	M/s. JCB India Ltd., 23/7, Mathura Road, Ballabgarh- 121 004, Haryana,India.	F7	JCB 448 TG-72	72 kW	ICAT/MOEF/DGTA/IMP/JCB-F7/J-0542 dt. 20.06.2014
62			JCB 448 TG-60	60 kW	
63		F8	JCB 448 TAG-92	92 kW	ICAT/MOEF/DGTA/IM P/JCB-F8/J-0543 dt. 20.06.2014
64		F9	JCB 448 TCAG-121	121kW	ICAT/MOEF/DGTA/JCB - F9/K-0463 dt. 15.06.2015
65	Cooper CorporaOonPvt. Ltd, Plot no. M60-1, Engine Division Post- Kodoli,Addl. MIDC Satara, 415003	F9	2A5D1A31.4CW	31.4 kW	ARAI/MoEF/DGTA/CCPL-F9/2014- 03,Dated: 2-Jul 2014
66			2A5D1A34.5CW	34.5 kW	
67		F15	2A5D1A37.5IW	37.5 kW	ARAI/MoEF/DGTA/CCPL F15/2017-08 Dated: 12-Feb 2018
68			2A5D1A34.5IW	34.5 kW	
69			2A5D1A31.4IW	32 kW	
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S. No.	Manufacturer Name & Address	Engine Family	Engine Model	Rated Gross Mechanical Declared Power	Type Approval Certificate Number
70	VE Commercial Vehicle Ltd., 102, Industrial area No-2, Pithampur- 454775, Dist-Dhar, Madhya Pradesh	F4	EE483TCI 62.5kVA CPCB-II	59 kW	ARAI/MoEF/DGTA/VECV-F4/2014- 01-E1 Dated 3-Nov-2017
71			EE483TCI 50kVA CPCB-II	48 kW	
72		F5	EE683 TCI 82.5KVA CPCB-II	77 kW	ARAI/MOEF/DGTA/VECV-F5/2014- 02-E1 Dated 3-Nov-2017
73		F7	EE694TCI 125KVA CPCB-II	115 kW	ARAI/MoEF/DGTA/VECV-F7/2017- 10 Dated 21-Jun-2017
74			EE694TCI 100KVA CPCB-II	95 kW	
75	M/s. Baudouin (Weifang) Power Co. Ltd., Add : No. 197A, Fushou East Street., High-new Technology, Industrial Development Zone, Weifang, Shandong, China.	F6	6M11G140/5E3	129 kW	ICAT/MoEFCC/DGTA/ IMP/BWPCL-F6/N- 2136 dt. 16.11.2018
76			6M11G12 5/5E3	117 kW	
77			4M11G82. 5/5E3	85 kW	
78		4M12G6D5	4M12G6D2/5	125 kW	ICAT/MoEFCC/DGTA/ IMP/BWPCL-4M12G6D5/P-0884 dt.13.07.2020
79		4M06G6D3	4M06G6D2/3	96 kW	ICAT/MoEFCC/DGTA/ IMP/BWPCL-4M06G6D3/P-0879 dt.13.07.2020
80		4M06G6D5	4M06G6D2/5	60 kW	ICAT/MoEFCC/DGTA/ IMP/BWPCL-4M06G6D5/P-0882, dt.13.07.2020
81		4M07G6	4M07G6D2/3	120 kW	ICAT/MoEFCC/DGTA/ IMP/BWPCL-4M07G6/P-1729 dt. 01.12.2020
82		4M07G2	4M07G2D2/5	78 kW	ICAT/MoEFCC/DGTA/ IMP/BWPCL-4M07G2/P-1730 dt.01.12.2020
83	INTERNATIONAL TRACTOR LTD.Village - Chak, Gujran, P.O.Piplanwala, Jalandhar Road, Hoshiarpur,Punjab-146 022.	F25	4105GLT	52.3 kW	ICAT/MOEF/DGTA/IT L-F25/M-1318 dt.07.07.2017
84			4105GLTL	42.44 kW	
85			4105GTIC	66.41 kW	ICAT/MOEF/DGTA/IT L-F24/M-1189 dt.07.07.2017
86	ESCORTS LTD.Plot No. 2 & 3, Sector – 13,Faridabad – 121007, Haryana	F9	G62.5	65.5 kW	ICAT/MOEF/DGTA/ESCORTS-F9/L-1241 dt.17.10.2016
87	EICHER TRACTORS, (A Unit Of TAFE Motors & Tractors Ltd.) Itarana Road, Alwar- 301 001	F12	1751 ES	118 kW	ICAT/MOEFCC/DGTA/ EICHER-F12/O-0982,dt. 28.05.2019
88		F9	881ES	60.5 kW	ICAT/MOEF/DGTA/EICHER-F9/J-0296,dt.25.03.2014
89	VE Commercial Vehicle Ltd., 102, Industrial area No-2, Pithampur 454775, Dist-Dhar, Madhya Pradesh	F11	EE483-TCI 30KVA CPCB-2	28 kW	ARAI/MoEF/DGTA/VECV F11/2015-08-E1, Dated 9-May 2016

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S. No.	Manufacturer Name & Address	Engine Family	Engine Model	Rated Gross Mechanical Declared Power	Type Approval Certificate Number
90	EICHER TRACTORS, (A Unit Of TAFE Motors & Tractors Ltd.) Itarana Road, Alwar- 301 001	F5	621ES	43.5 kW	ICAT/MOEF/DGTA/EICHER-F5/J-0322 dt.27.03.2014
91		F13	422 TCI	44.14 kW	ICAT/MOEF/DGTA/EICHER -F13/J-0589 dt., 03.07.2014
92		F14	1121ES	74.9 kW	ICAT/MoEFCC/DGTA/ EICHER-F-14/N-1814-E01 dt. 08.07.20
93		F15	1401ES	94.3 kW	ICAT/MOEF/DGTA/EI CHER-F-15/L-0156,dt.10.02.2016
94		F18	1122ES	74.9 kW	ICAT/MOEFCC/DGTA/ EICHER-F18/O-2045 dt. 25.11.2019
95		F19	1402ES	94.3 kW	ICAT/MOEFCC/DGTA/ EICHER-F19/P-0506,dt. 19.03.2020
96	M/s. Shandong Heavy Industry India Pvt. Ltd., Add: Survey No. 280/281,Hinjawadi Phase II, Village Mann, Taluka Mulshi, Pune - 411057, Maharashtra,India	F6	6M11G140/5E3	129 kW	ICAT/MoEFCC/DGTA/ SHIPL-F6/N-2135 dt. 16.11.2018
97			6M11G125/5E3	117 kW	
98			4M11G82.5/5E3	85 kW	
99		6M11G	6M11G2D2/5	143 kW	ICAT/MoEFCC/DGTA/ SHIPL- 6M11G/P-0835 dt. 06.07.2020
100		4M12G 6D5	4M12G6D2/5	125 kW	ICAT/MoEFCC/DGTA/ SHIPL- 4M06G6D3/P- 0880 dt.13.07.2020
101		4M06G 6D3	4M06G6D2/3	96 kW	ICAT/MoEFCC/DGTA/ SHIPL- 4M12G6D5/P- 0883 dt.13.07.2020
102		4M06G 6D5	4M06G6D2/5	60 kW	ICAT/MoEFCC/DGTA/ SHIPL- 4M06G6D5/P- 0881 dt.13.07.2020
103		4M07G 6	4M07G6D2/3	120 kW	ICAT/MoEFCC/DGTA/ SHIPL- 4M07G6/P- 1808 dt. 14.12.2020
104		4M07G 2	4M07G2D2/5	78 kW	ICAT/MoEFCC/DGTA/ SHIPL- 4M07G2/P- 1807, dt.14.12.2020
105	EICHER TRACTORS, (A Unit Of TAFE Motors & Tractors Ltd.) Itarana Road, Alwar- 301 001	F10	422TC	35.5 kW	ICAT/MOEF/DGTA/EI CHER-F10/J-0298 dt, 25.03.2014
106		F4	422ES	26.1 kW	ICAT/MOEF/DGTA/EI CHER-F4/J-0301 dt, 25.03.2015
107	Cummins India Ltd.Kothrud, Pune 4110388	F37	X3.6TAA G1	39.14 kW	ARAI/MoEF/DGTA/CILP-F37/2014-12-E3,Dated: 22-Feb 2016
108	Cummins India Ltd. Kothrud, Pune 411038	F58	X2.7TAA-G7	35.4 kW	ARAI/MoEF/DGTA/CILP-F58/2018-29,Dated: 30-Nov 2018 & ARAI/MoEF/DGTA/CILP-F58/2019-31,Dated. 23rdAugust 2019
109			X2.7TAA-G8	38.3 kW	
110	Cummins India Ltd. Kothrud, Pune 411038	F35	X2.7TAA-G2	28.7 kW	ARAI/MOEF/DGTA/CILP- F35/2014-10-E2,Dated: 22-Feb 2016
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S. No.	Manufacturer Name & Address	Engine Family	Engine Model	Rated Gross Mechanical Declared Power	Type Approval Certificate Number
111	Kirloskar Oil Engines Ltd. Khadki, Pune	F107	3R1040TG1	30.9 kW	ARAI/MoEF/DGTA/KOEL F107/2014-07-E1,Dated 28-Dec 2021
112	Mahindra &Mahindra Ltd. Implementa ondivision, MIDC, Hingna Road,Nagpur - 440 016	F42	3445 TCIGM-C2	29.4 kW	ARAI/MOEF/DGTA/M&M F42/2014-05-E4, Dated 20-Nov 2017
113		F75	4575TCIGM-C2	38.1 kW	ARAI/MOEF/DGTA/M&M F75/2017-15-E1,Dated 20-Nov 2017
114		F87	3385 ELSTCGMC2	25.8 kW	ARAI/MOEF/DGTA/M&M F87/20179-18 dt, 04.06.2019
115	SKL (India) PrivateLimited C 2117 Oberoi GardenEstate, Chandivali,Andheri, (East), Mumbai-400 072	F6	4H50TIC/1500	28.7 kW	ARAI/MoEF/DGTA/IMP/SKL F6/2015-01-E1,Dated 3-Jul 2017
116			4H50TIC/3000	50 kW	
117	Tata Motors Limited, Pimpri, Pune	F25	497SP TC77	36 kW	ARAI/MoEF/DGTA/TML-F25/2016-05,Dated 26-Aug 2016
118			497SP TC78	30 kW	
119	VE CommercialVehicle Ltd., 102, Industrial area No-2, Pithampur 454775, Dist-Dhar, Madhya Pradesh	F4	EE483TCI40kVA CPCB-II	38 kW	ARAI/MoEF/DGTA/VECV-F4/2014-01-E1, Dated 3-Nov 2017
120	Mahindra &Mahindra Ltd. Implementa ondivision, MIDC, Hingna Road,Nagpur - 440 016	F74	3385 TCIGM-C2	25.77 kW	ARAI/MOEF/DGTA/M&M F74/2017-14-E2,Dated 20-Nov 2017
121	M/s. Simpson & Co. Ltd, Huzur Gardens, Sembium, Chennai-600011	F19	SI327T(G)-F19	28.71 kW	ARAI/MOEF/DGTA/SC L -F19/2014-08 DT. 18.08.2014
122	ESCORTS LTD.Plot No. 2 & 3, Sector – 13,Faridabad – 121007, Haryana	F7	G-30-II	25.5 kW	ICAT/MOEF/DGTA/ES CORTS-F7/J-0287 dt, 24.03.2014
123		F11	G-25A	26.5 kW	ICAT/MOEF/DGTA/ES CORTS-F11/P-0211 dt, 03.02.2020
124	Cooper CorporaOonPvt. Ltd, Plot no. M60-1, Engine Division Post- Kodoli,Addl. MIDC Satara, 415003	F12	3B5D1C62IW	62 kW	ARAI/MOEF/DGTA/CCPL-F12/2017-05, dt. 23.06.2025
125			3B5D1C52IW	52 kW	
Note: Engine details mentioned above are sourced from : www.cpcb.nic.in					

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