



Installation manual



Technical data

Industrial engines
DC09, DC13, DC16
OC16



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Changes from the previous issue

The changes made in this document compared with the previous issue are marked with a black line in the left-hand margin. The changes are also described below.

- Engine type DC16 093A has been added.
- Power class COP has been added to OC16.

Heat rejection

All-speed engines

Table of heat rejection through a radiator in kW for all-speed engines at full engine power according to ICFN and IFN.

Ambient conditions: 25°C, 1,013 mbar.

Engine type	Engine power	Heat rejection (kW), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 074A	202 kW	74	74	80	91
DC09 074A	232 kW	87	81	85	98
DC09 074A	243 kW	85	88	88	101
DC09 074A	257 kW	92	92	92	106
DC09 074A	276 kW	94	101	101	112
DC09 074A	294 kW	94	104	108	117
DC09 076A	202 kW	61	80	88	98
DC09 076A	232 kW	65	83	96	104
DC09 076A	243 kW	66	86	99	108
DC09 076A	257 kW	69	91	103	111



Engine type	Engine power	Heat rejection (kW), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 077A	232 kW	90	90	96	107
DC09 077A	243 kW	92	94	99	111
DC09 077A	257 kW	94	100	104	115
DC09 077A	276 kW	96	110	112	121
DC09 077A	294 kW	98	111	120	129
DC09 078A	202 kW	72	84	87	100
DC09 078A	202 kW	72	81	86	-
DC09 080A	202 kW	72	84	87	100
DC09 080A	202 kW	72	81	86	-
DC09 083A	243 kW	92	94	99	111
DC09 083A	257 kW	94	100	104	115
DC09 083A	276 kW	96	110	112	121
DC09 083A	294 kW	98	111	120	129
DC09 083A	232 kW	90	90	96	107
DC09 084A/384A	202 kW	114	115	115	115
DC09 085A/385A	232 kW	116	124	124	122
DC09 085A/385A	243 kW	119	130	130	128
DC09 085A/385A	257 kW	119	133	134	135
DC09 086A/386A	276 kW	115	140	142	140
DC09 086A/386A	294 kW	115	142	149	153
DC09 087A/387A	202 kW	105	110	111	-
DC09 089A/389A	237 kW	109	117	126	-
DC13 074A	257 kW	73	75	83	96
DC13 074A	294 kW	78	86	91	103
DC13 074A	331 kW	81	95	99	112



Engine type	Engine power	Heat rejection (kW), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC13 074A	368 kW	82	103	106	120
DC13 076A	257 kW	66	83	85	100
DC13 076A	294 kW	68	88	91	105
DC13 076A	331 kW	68	91	99	120
DC13 077A	294 kW	94	90	94	104
DC13 077A	331 kW	99	100	99	113
DC13 077A	368 kW	101	106	109	125
DC13 077A	405 kW	104	117	125	133
DC13 078A	264 kW	76	78	89	-
DC13 080A	264 kW	79	81	85	-
DC13 081A	257 kW	88	83	87	94
DC13 081A	283 kW	83	86	92	-
DC13 082A	283 kW	86	94	94	-
DC13 083A	294 kW	107	101	104	113
DC13 083A	331 kW	19	27	32	33
DC13 083A	368 kW	117	120	125	128
DC13 083A	405 kW	124	136	146	149
DC13 084A/384A	294 kW	117	133	138	140
DC13 084A/384A	331 kW	120	137	143	145
DC13 085A/385A	368 kW	125	158	162	150
DC13 085A/385A	405 kW	125	160	170	170 ¹
DC13 087A/387A	257 kW	98	115	119	-
DC13 087A/387A	283 kW	104	122	129	-
DC13 087A/387A	257 kW	103	115	119	120
DC13 091A	257 kW	85	86	93	101



Engine type	Engine power	Heat rejection (kW), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC13 091A	294 kW	95	89	98	108
DC13 091A	331 kW	102	96	102	113
DC13 091A	368 kW	106	118	119	126
DC16 074A	405 kW	164	134	158	203
DC16 074A	478 kW	164	165	185	219
DC16 074A	515 kW	164	171	203	222
DC16 076A	368 kW	136	135	147	179 ¹
DC16 076A	405 kW	136	139	163	194 ¹
DC16 076A	425 kW	136	144	173	205 ¹
DC16 077A	405 kW	147	144	148	164
DC16 077A	478 kW	147	172	173	194
DC16 077A	515 kW	147	176	188	212
DC16 083A	405 kW	155	142	144	156
DC16 083A	478 kW	155	169	164	180
DC16 083A	515 kW	155	175	179	195
DC16 084A/384A	405 kW	169	188	202	225
DC16 084A/384A	478 kW	166	202	214	243
DC16 084A/384A	493 kW	166	204	218	248
DC16 085A	566 kW	162	187	216	231 ²
DC16 086A	566 kW	169	216	245	269

1. 1,900 rpm.

2. 2,000 rpm.



Single-speed engines

Table of heat rejection through a radiator in kW for single-speed engines at full engine power according to power level PRP (Prime power), ESP (Maximum stand-by power) or COP (Continuous power).

Ambient conditions: 25°C, 1,013 mbar.

Diesel engines

Engine type	Engine power	Heat rejection (kW), engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC09 071A	226-251 kW/250-275 kVA	107	-	114	-
DC09 071A	248-273 kW/275-300 kVA	113	-	122	-
DC09 071A	267-292 kW/300-325 kVA	119	-	128	-
DC09 071A	289-313 kW/325-350 kVA	128	-	138	-
DC09 072A	226-276 kW/250-303 kVA	78	85	86	92
DC09 072A	248-300 kW/275-330 kVA	84	93	91	102
DC09 072A	267-321 kW/300-358 kVA	90	102	98	110
DC09 072A	289-358 kW/325-400 kVA	101	109	111	123
DC09 073A	226-276 kW/250-303 kVA	84	91	92	101
DC09 073A	248-300 kW/275-330 kVA	91	100	100	111
DC09 073A	267-321 kW/300-358 kVA	97	109	107	119
DC09 073A	289-358 kW/325-400 kVA	107	114	120	127
DC13 071A	325-371 kW/364-409 kVA	138	-	151	-
DC13 071A	364-371 kW/409-409 kVA	149	-	151	-
DC13 072A	326-406 kW/365-450 kVA	105	111	115	125
DC13 072A	365-449 kW/410-500 kVA	112	119	127	143
DC13 072A	403-487 kW/455-550 kVA	119	134	142	166



Engine type	Engine power	Heat rejection (kW), engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC13 072A	438-487 kW/500-550 kVA	134	158	142	166
DC13 073A	326-406 kW/365-450 kVA	111	121	126	130
DC13 073A	365-449 kW/410-500 kVA	123	125	131	138
DC13 073A	403-487 kW/455-550 kVA	125	130	136	162
DC13 073A	438-487 kW/500-550 kVA	130	158	136	162
DC16 071A	438-483 kW/500-550 kVA	198	-	219	-
DC16 071A	480-483 kW/550-550 kVA	202	-	219	-
DC16 072A	536-632 kW/600-715 kVA	203	221	222	240
DC16 072A	578-678 kW/650-770 kVA	218	236	235	255
DC16 072A	621-704 kW/700-800 kVA	232	258	243	268
DC16 078A	534-587 kW/600-660 kVA	175	187	184	211
DC16 078A	576-634 kW/650-715 kVA	186	194	206	238
DC16 078A	620-680 kW/700-770 kVA	192	229	231	279
DC16 093A	447-496 kW/501-567 kVA	139	156	158	174
DC16 093A	486-538 kW/550-613 kVA	152	177	173	193
DC16 093A	529-585 kW/600-668 kVA	173	199	191	213
DC16 093A	558-634 kW/640-720 kVA	189	219	209	242



Gas engines

Engine type	Engine power	Heat rejection (kW), engine speed (rpm)			
		1,500		1,800	
		PRP	COP	PRP	COP
OC16 071A	333-372 kW/364-409 kVA	177	176	201	195
OC16 071A	372-411 kW/409-455 kVA	187	176	214	195
OC16 071A	407-426 kW/455-477 kVA	199	176	220	195



Air consumption

All-speed engines

Table of air consumption in kg/min for all-speed engines at full engine power according to ICFN and IFN.

Ambient conditions: 25°C, 1,013 mbar.

Engine type	Engine power	Air consumption (kg/min), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 074A	202 kW	17	21	25	27
DC09 074A	232 kW	18	23	26	28
DC09 074A	243 kW	18	23	26	28
DC09 074A	257 kW	18	24	26	28
DC09 074A	276 kW	18	23	26	29
DC09 074A	294 kW	18	23	26	29
DC09 076A	202 kW	14	22	26	29
DC09 076A	232 kW	15	22	26	29
DC09 076A	243 kW	16	23	26	29
DC09 076A	257 kW	16	23	26	29
DC09 077A	232 kW	15	20	22	24
DC09 077A	243 kW	16	20	22	24
DC09 077A	257 kW	16	20	23	25
DC09 077A	276 kW	16	21	24	25
DC09 077A	294 kW	17	21	24	26
DC09 078A	202 kW	15	19	21	23
DC09 078A	202 kW	12	18	21	-
DC09 080A	202 kW	15	19	21	23



Engine type	Engine power	Air consumption (kg/min), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 080A	202 kW	12	18	21	-
DC09 083A	243 kW	16	20	22	24
DC09 083A	257 kW	16	20	23	25
DC09 083A	276 kW	16	21	24	25
DC09 083A	294 kW	17	21	24	26
DC09 083A	232 kW	15	20	22	24
DC09 084A/384A	202 kW	12	16	18	19
DC09 085A/385A	232 kW	15	18	21	23
DC09 085A/385A	243 kW	15	19	21	24
DC09 085A/385A	257 kW	16	20	22	24
DC09 086A/386A	276 kW	16	21	23	25
DC09 086A/386A	294 kW	16	22	24	26
DC09 087A/387A	202 kW	11	15	18	-
DC09 089A/389A	237 kW	11	16	20	-
DC13 074A	257 kW	21	26	30	33
DC13 074A	294 kW	22	28	31	34
DC13 074A	331 kW	23	30	32	35
DC13 074A	368 kW	24	31	33	35
DC13 076A	257 kW	18	28	30	34
DC13 076A	294 kW	20	29	31	35
DC13 076A	331 kW	19	30	33	37
DC13 077A	294 kW	20	27	30	32
DC13 077A	331 kW	21	29	32	34
DC13 077A	368 kW	21	30	33	34
DC13 077A	405 kW	21	30	33	35



Engine type	Engine power	Air consumption (kg/min), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC13 078A	264 kW	15	21	29	-
DC13 080A	264 kW	16	22	29	-
DC13 081A	257 kW	17	23	28	31
DC13 081A	283 kW	16	23	29	-
DC13 082A	283 kW	17	24	30	-
DC13 083A	294 kW	19	25	30	32
DC13 083A	331 kW	19	27	32	33
DC13 083A	368 kW	20	29	33	35
DC13 083A	405 kW	20	30	33	35
DC13 084A/384A	294 kW	18	24	29	30
DC13 084A/384A	331 kW	18	25	31	31
DC13 085A/385A	368 kW	18	26	33	33
DC13 085A/385A	405 kW	18	27	34	34 ¹
DC13 087A/387A	257 kW	16	24	27	-
DC13 087A/387A	283 kW	17	25	28	-
DC13 087A/387A	257 kW	17	24	27	29
DC13 091A	257 kW	19	25	30	34
DC13 091A	294 kW	20	27	32	34
DC13 091A	331 kW	20	30	32	35
DC13 091A	368 kW	21	29	33	36
DC16 074A	405 kW	25	36	40	44
DC16 074A	478 kW	25	38	41	46
DC16 074A	515 kW	25	38	41	46
DC16 076A	368 kW	22	39	41	46 ¹
DC16 076A	405 kW	22	40	42	47 ¹



Engine type	Engine power	Air consumption (kg/min), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC16 076A	425 kW	22	40	43	47 ¹
DC16 077A	405 kW	23	34	40	46
DC16 077A	478 kW	23	37	43	47
DC16 077A	515 kW	23	37	44	48
DC16 083A	405 kW	23	33	40	46
DC16 083A	478 kW	23	36	43	48
DC16 083A	515 kW	23	37	44	48
DC16 084A/384A	405 kW	24	28	32	40
DC16 084A/384A	478 kW	25	34	36	42
DC16 084A/384A	493 kW	25	35	37	43
DC16 085A	566 kW	24	39	46	48 ²
DC16 086A	566 kW	25	37	44	48

1. 1,900 rpm.

2. 2,000 rpm.



Single-speed engines

Table of air consumption in kg/min for single-speed engines at full engine power according to power level PRP (Prime power), ESP (Maximum stand-by power) or COP (Continuous power).

Ambient conditions: 25°C, 1,013 mbar.

Diesel engines

Engine type	Engine power	Air consumption (kg/min), engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC09 071A	226-251 kW/250-275 kVA	19	-	25	-
DC09 071A	248-273 kW/275-300 kVA	20	-	25	-
DC09 071A	267-292 kW/300-325 kVA	21	-	25	-
DC09 071A	289-313 kW/325-350 kVA	22	-	25	-
DC09 072A	226-276 kW/250-303 kVA	21	22	27	27
DC09 072A	248-300 kW/275-330 kVA	22	23	27	27
DC09 072A	267-321 kW/300-358 kVA	23	23	27	27
DC09 072A	289-358 kW/325-400 kVA	23	24	27	28
DC09 073A	226-276 kW/250-303 kVA	22	23	27	27
DC09 073A	248-300 kW/275-330 kVA	23	23	27	27
DC09 073A	267-321 kW/300-358 kVA	23	24	27	27
DC09 073A	289-358 kW/325-400 kVA	24	25	27	29
DC13 071A	325-371 kW/364-409 kVA	27	-	31	-
DC13 071A	364-371 kW/409-409 kVA	27	-	31	-
DC13 072A	326-406 kW/365-450 kVA	25	27	32	33
DC13 072A	365-449 kW/410-500 kVA	28	30	34	35
DC13 072A	403-487 kW/455-550 kVA	30	32	35	36



Engine type	Engine power	Air consumption (kg/min), engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC13 072A	438-487 kW/500-550 kVA	32	34	35	36
DC13 073A	326-406 kW/365-450 kVA	29	31	34	34
DC13 073A	365-449 kW/410-500 kVA	31	32	35	35
DC13 073A	403-487 kW/455-550 kVA	32	33	35	37
DC13 073A	438-487 kW/500-550 kVA	33	34	35	37
DC16 071A	438-483 kW/500-550 kVA	32	-	38	-
DC16 071A	480-483 kW/550-550 kVA	34	-	38	-
DC16 072A	536-632 kW/600-715 kVA	35	38	41	44
DC16 072A	578-678 kW/650-770 kVA	37	40	44	47
DC16 072A	621-704 kW/700-800 kVA	39	42	45	47
DC16 078A	534-587 kW/600-660 kVA	41	42	43	44
DC16 078A	576-634 kW/650-715 kVA	42	43	44	45
DC16 078A	620-680 kW/700-770 kVA	43	44	45	47
DC16 093A	447-496 kW/501-567 kVA	40	41	45	46
DC16 093A	486-538 kW/550-613 kVA	41	41	46	46
DC16 093A	529-585 kW/600-668 kVA	41	42	46	48
DC16 093A	558-634 kW/640-720 kVA	41	44	47	50



Gas engines

Engine type	Engine power	Air consumption (kg/min), engine speed (rpm)			
		1,500		1,800	
		PRP	COP	PRP	COP
OC16 071A	333-372 kW/364-409 kVA	27	27	31	29
OC16 071A	372-411 kW/409-455 kVA	30	27	34	29
OC16 071A	407-426 kW/455-477 kVA	32	27	35	29



Radiated heat

All-speed engines

Table of radiated heat in kW for all-speed engines at full engine power according to ICFN and IFN.

Ambient conditions: 25°C, 1,013 mbar.

Engine type	Engine power	Radiated heat (kW), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 074A	202 kW	18	19	20	22
DC09 074A	232 kW	20	22	23	25
DC09 074A	243 kW	21	23	24	26
DC09 074A	257 kW	21	25	25	27
DC09 074A	276 kW	22	27	27	29
DC09 074A	294 kW	22	28	30	31
DC09 076A	202 kW	12	17	19	21
DC09 076A	232 kW	14	18	21	23
DC09 076A	243 kW	15	20	24	25
DC09 076A	257 kW	15	20	24	25
DC09 077A	232 kW	20	22	23	25
DC09 077A	243 kW	20	23	24	26
DC09 077A	257 kW	21	24	25	27
DC09 077A	276 kW	21	26	27	29
DC09 077A	294 kW	22	27	29	30
DC09 078A	202 kW	18	19	20	22
DC09 078A	202 kW	15	18	20	-
DC09 080A	202 kW	18	19	20	22



Engine type	Engine power	Radiated heat (kW), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 080A	202 kW	15	18	20	-
DC09 083A	243 kW	20	23	24	26
DC09 083A	257 kW	21	24	25	27
DC09 083A	276 kW	21	26	27	29
DC09 083A	294 kW	22	27	29	30
DC09 083A	232 kW	20	22	23	25
DC09 084A/384A	202 kW	18	19	19	20
DC09 085A/385A	232 kW	20	22	22	23
DC09 085A/385A	243 kW	21	23	23	24
DC09 085A/385A	257 kW	21	24	24	26
DC09 086A/386A	276 kW	21	26	26	27
DC09 086A/386A	294 kW	21	27	28	29
DC09 087A/387A	202 kW	15	18	19	-
DC09 089A/389A	237 kW	16	19	22	-
DC13 074A	257 kW	19	21	22	24
DC13 074A	294 kW	21	24	25	27
DC13 074A	331 kW	22	27	28	30
DC13 074A	368 kW	22	30	31	32
DC13 076A	257 kW	16	22	24	25
DC13 076A	294 kW	17	24	26	29
DC13 076A	331 kW	17	26	29	31
DC13 077A	294 kW	21	24	25	26
DC13 077A	331 kW	22	27	28	29
DC13 077A	368 kW	23	29	31	32
DC13 077A	405 kW	23	30	34	35



Engine type	Engine power	Radiated heat (kW), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC13 078A	264 kW	17	20	25	-
DC13 080A	264 kW	17	21	25	-
DC13 081A	257 kW	21	23	24	25
DC13 081A	283 kW	19	24	26	-
DC13 082A	283 kW	20	25	27	-
DC13 083A	294 kW	25	27	28	29
DC13 083A	331 kW	26	30	32	33
DC13 083A	368 kW	26	33	36	37
DC13 083A	405 kW	27	36	40	41
DC13 084A/384A	294 kW	25	27	28	30
DC13 084A/384A	331 kW	26	30	32	33
DC13 085A/385A	368 kW	27	33	36	37
DC13 085A/385A	405 kW	27	34	39	40 ¹
DC13 087A/387A	257 kW	18	23	25	-
DC13 087A/387A	283 kW	20	25	27	-
DC13 087A/387A	257 kW	19	24	25	26
DC13 091A	257 kW	21	22	24	25
DC13 091A	294 kW	24	26	27	29
DC13 091A	331 kW	25	30	30	32
DC13 091A	368 kW	26	33	34	36
DC16 074A	405 kW	33	38	40	45
DC16 074A	478 kW	33	45	47	52
DC16 074A	515 kW	33	46	51	54
DC16 076A	368 kW	28	36	39	44 ¹
DC16 076A	405 kW	28	37	43	48 ¹



Engine type	Engine power	Radiated heat (kW), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC16 076A	425 kW	28	38	45	50 ¹
DC16 077A	405 kW	32	38	40	44
DC16 077A	478 kW	32	45	47	50
DC16 077A	515 kW	32	46	50	54
DC16 083A	405 kW	33	38	40	43
DC16 083A	478 kW	33	45	46	50
DC16 083A	515 kW	33	46	49	53
DC16 084A/384A	405 kW	34	38	39	43
DC16 084A/384A	478 kW	36	46	47	50
DC16 084A/384A	493 kW	36	47	48	52
DC16 085A	566 kW	33	48	57	59 ²
DC16 086A	566 kW	32	47	56	59

1. 1,900 rpm.

2. 2,000 rpm.



Single-speed engines

Table of radiated heat in kW for single-speed engines at full engine power according to power level PRP (Prime power), ESP (Maximum stand-by power) or COP (Continuous power).

Ambient conditions: 25°C, 1,013 mbar.

Diesel engines

Engine type	Engine power	Radiated heat (kW), engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC09 071A	226-251 kW/250-275 kVA	20	-	22	-
DC09 071A	248-273 kW/275-300 kVA	22	-	24	-
DC09 071A	267-292 kW/300-325 kVA	23	-	25	-
DC09 071A	289-313 kW/325-350 kVA	25	-	27	-
DC09 072A	226-276 kW/250-303 kVA	18	20	21	23
DC09 072A	248-300 kW/275-330 kVA	20	22	23	25
DC09 072A	267-321 kW/300-358 kVA	22	24	24	27
DC09 072A	289-358 kW/325-400 kVA	24	26	28	31
DC09 073A	226-276 kW/250-303 kVA	19	21	22	24
DC09 073A	248-300 kW/275-330 kVA	21	23	24	26
DC09 073A	267-321 kW/300-358 kVA	23	25	26	28
DC09 073A	289-358 kW/325-400 kVA	25	27	28	31
DC13 071A	325-371 kW/364-409 kVA	32	-	37	-
DC13 071A	364-371 kW/409-409 kVA	35	-	37	-
DC13 072A	326-406 kW/365-450 kVA	25	27	29	32
DC13 072A	365-449 kW/410-500 kVA	28	31	33	37
DC13 072A	403-487 kW/455-550 kVA	31	35	36	41



Engine type	Engine power	Radiated heat (kW), engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC13 072A	438-487 kW/500-550 kVA	35	39	36	41
DC13 073A	326-406 kW/365-450 kVA	27	30	32	34
DC13 073A	365-449 kW/410-500 kVA	31	33	34	37
DC13 073A	403-487 kW/455-550 kVA	33	35	36	41
DC13 073A	438-487 kW/500-550 kVA	35	40	36	41
DC16 071A	438-483 kW/500-550 kVA	43	-	49	-
DC16 071A	480-483 kW/550-550 kVA	46	-	49	-
DC16 072A	536-632 kW/600-715 kVA	49	54	55	60
DC16 072A	578-678 kW/650-770 kVA	53	58	59	64
DC16 072A	621-704 kW/700-800 kVA	57	63	61	67
DC16 078A	534-587 kW/600-660 kVA	48	53	50	55
DC16 078A	576-634 kW/650-715 kVA	52	57	54	60
DC16 078A	620-680 kW/700-770 kVA	56	63	59	65
DC16 093A	447-496 kW/501-567 kVA	41	45	42	47
DC16 093A	486-538 kW/550-613 kVA	44	50	46	51
DC16 093A	529-585 kW/600-668 kVA	49	55	51	56
DC16 093A	558-634 kW/640-720 kVA	52	58	55	63



Gas engines

Engine type	Engine power	Radiated heat (kW), engine speed (rpm)			
		1,500		1,800	
		PRP	COP	PRP	COP
OC16 071A	333-372 kW/364-409 kVA	41	33	48	36
OC16 071A	372-411 kW/409-455 kVA	46	33	52	36
OC16 071A	407-426 kW/455-477 kVA	50	33	54	36



Heat output to charge air cooler

All-speed engines

Table of radiated heat to the charge air cooler in kW for all-speed engines at full engine power according to ICFN and IFN.

Ambient conditions: 25°C, 1,013 mbar.

Engine type	Engine power	Heat output to charge air cooler (kW) engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 074A	202 kW	42	49	56	61
DC09 074A	232 kW	46	60	63	65
DC09 074A	243 kW	46	61	64	65
DC09 074A	257 kW	46	62	63	66
DC09 074A	276 kW	47	61	64	68
DC09 074A	294 kW	47	61	65	71
DC09 076A	202 kW	29	52	58	67
DC09 076A	232 kW	33	54	60	66
DC09 076A	243 kW	35	55	62	68
DC09 076A	257 kW	38	57	63	70
DC09 077A	232 kW	30	38	40	42
DC09 077A	243 kW	31	40	42	44
DC09 077A	257 kW	32	42	45	47
DC09 077A	276 kW	33	45	49	51
DC09 077A	294 kW	36	46	52	55
DC09 078A	202 kW	27	35	38	39
DC09 078A	202 kW	18	32	38	-
DC09 080A	202 kW	27	35	38	39



Engine type	Engine power	Heat output to charge air cooler (kW) engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 080A	202 kW	18	32	38	-
DC09 083A	243 kW	31	40	42	44
DC09 083A	257 kW	32	42	45	47
DC09 083A	276 kW	33	45	49	51
DC09 083A	294 kW	36	46	52	55
DC09 083A	232 kW	30	38	40	42
DC09 084A/384A	202 kW	24	29	29	26
DC09 085A/385A	232 kW	34	43	44	46
DC09 085A/385A	243 kW	36	47	47	48
DC09 085A/385A	257 kW	35	50	51	50
DC09 086A/386A	276 kW	34	54	55	55
DC09 086A/386A	294 kW	34	55	59	59
DC09 087A/387A	202 kW	17	26	29	-
DC09 089A/389A	237 kW	18	30	36	-
DC13 074A	257 kW	44	53	56	61
DC13 074A	294 kW	52	60	62	66
DC13 074A	331 kW	55	69	67	71
DC13 074A	368 kW	57	77	72	76
DC13 076A	257 kW	33	61	60	67
DC13 076A	294 kW	38	67	66	74
DC13 076A	331 kW	38	71	73	83
DC13 077A	294 kW	38	53	56	59
DC13 077A	331 kW	41	62	65	66
DC13 077A	368 kW	42	67	70	70
DC13 077A	405 kW	43	69	73	73



Engine type	Engine power	Heat output to charge air cooler (kW) engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC13 078A	264 kW	19	35	57	-
DC13 080A	264 kW	19	33	52	-
DC13 081A	257 kW	28	40	52	60
DC13 081A	283 kW	23	43	58	-
DC13 082A	283 kW	24	44	56	-
DC13 083A	294 kW	34	47	56	56
DC13 083A	331 kW	37	58	66	64
DC13 083A	368 kW	38	66	72	72
DC13 083A	405 kW	40	71	75	79
DC13 084A/384A	294 kW	39	58	70	62
DC13 084A/384A	331 kW	42	63	79	68
DC13 085A/385A	368 kW	44	68	90	76
DC13 085A/385A	405 kW	44	69	94	92 ¹
DC13 087A/387A	257 kW	30	54	53	-
DC13 087A/387A	283 kW	33	60	59	-
DC13 087A/387A	257 kW	33	57	53	49
DC13 091A	257 kW	33	46	60	67
DC13 091A	294 kW	39	59	67	70
DC13 091A	331 kW	41	71	71	79
DC13 091A	368 kW	42	68	72	85
DC16 074A	405 kW	46	78	86	95
DC16 074A	478 kW	46	91	91	106
DC16 074A	515 kW	46	93	92	110
DC16 076A	368 kW	37	94	89	109 ¹
DC16 076A	405 kW	37	95	94	117 ¹



Engine type	Engine power	Heat output to charge air cooler (kW) engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC16 076A	425 kW	37	97	100	121 ¹
DC16 077A	405 kW	42	71	86	102
DC16 077A	478 kW	42	86	99	113
DC16 077A	515 kW	42	88	104	117
DC16 083A	405 kW	48	78	96	117
DC16 083A	478 kW	48	93	112	132
DC16 083A	515 kW	48	95	117	138
DC16 084A/384A	405 kW	57	61	66	94
DC16 084A/384A	478 kW	62	83	82	107
DC16 084A/384A	493 kW	62	88	87	112
DC16 085A	566 kW	56	121	148	151 ²
DC16 086A	566 kW	60	101	128	146

1. 1,900 rpm.

2. 2,000 rpm.



Single-speed engines

Table of heat output to charge air cooler in kW for single-speed engines at full engine power according to power level PRP (Prime power), ESP (Maximum stand-by power) or COP (Continuous power).

Ambient conditions: 25°C, 1,013 mbar.

Diesel engines

Engine type	Engine power	Heat output to charge air cooler (kW) engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC09 071A	226-251 kW/250-275 kVA	44	-	66	-
DC09 071A	248-273 kW/275-300 kVA	52	-	66	-
DC09 071A	267-292 kW/300-325 kVA	56	-	66	-
DC09 071A	289-313 kW/325-350 kVA	60	-	66	-
DC09 072A	226-276 kW/250-303 kVA	48	53	65	66
DC09 072A	248-300 kW/275-330 kVA	52	57	66	65
DC09 072A	267-321 kW/300-358 kVA	56	59	66	67
DC09 072A	289-358 kW/325-400 kVA	58	64	68	76
DC09 073A	226-276 kW/250-303 kVA	50	54	67	66
DC09 073A	248-300 kW/275-330 kVA	54	57	66	66
DC09 073A	267-321 kW/300-358 kVA	57	60	66	69
DC09 073A	289-358 kW/325-400 kVA	59	67	70	82
DC13 071A	325-371 kW/364-409 kVA	68	-	78	-
DC13 071A	364-371 kW/409-409 kVA	69	-	78	-
DC13 072A	326-406 kW/365-450 kVA	50	59	72	83
DC13 072A	365-449 kW/410-500 kVA	61	75	84	98
DC13 072A	403-487 kW/455-550 kVA	75	89	96	112



Engine type	Engine power	Heat output to charge air cooler (kW) engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC13 072A	438-487 kW/500-550 kVA	89	104	96	112
DC13 073A	326-406 kW/365-450 kVA	70	80	86	90
DC13 073A	365-449 kW/410-500 kVA	83	87	91	99
DC13 073A	403-487 kW/455-550 kVA	87	94	98	111
DC13 073A	438-487 kW/500-550 kVA	94	107	98	111
DC16 071A	438-483 kW/500-550 kVA	78	-	96	-
DC16 071A	480-483 kW/550-550 kVA	86	-	96	-
DC16 072A	536-632 kW/600-715 kVA	82	96	98	118
DC16 072A	578-678 kW/650-770 kVA	93	110	114	135
DC16 072A	621-704 kW/700-800 kVA	106	124	122	140
DC16 078A	534-587 kW/600-660 kVA	108	116	99	107
DC16 078A	576-634 kW/650-715 kVA	115	123	106	115
DC16 078A	620-680 kW/700-770 kVA	121	128	113	121
DC16 093A	447-496 kW/501-567 kVA	102	107	115	118
DC16 093A	486-538 kW/550-613 kVA	107	108	118	123
DC16 093A	529-585 kW/600-668 kVA	108	114	122	132
DC16 093A	558-634 kW/640-720 kVA	109	125	131	148



Gas engines

Engine type	Engine power	Heat output to charge air cooler (kW) engine speed (rpm)			
		1,500		1,800	
		PRP	COP	PRP	COP
OC16 071A	333-372 kW/364-409 kVA	52	51	55	49
OC16 071A	372-411 kW/409-455 kVA	64	51	65	49
OC16 071A	407-426 kW/455-477 kVA	75	51	70	49



Maximum intake air temperature

All-speed engines

Table of maximum intake air temperature downstream of the charge air cooler in °C for all-speed engines at full engine power according to ICFN and IFN.

Ambient conditions: 25°C, 1,013 mbar.

Note:

Check the temperature of the engine intake air when the installation is complete.

Engine type	Engine power	Maximum intake air temperature (°C), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 074A	202 kW	26	36	43	48
DC09 074A	232 kW	29	41	47	51
DC09 074A	243 kW	30	42	48	51
DC09 074A	257 kW	30	44	48	51
DC09 074A	276 kW	30	41	48	52
DC09 074A	294 kW	30	41	47	52
DC09 076A	202 kW	23	39	45	50
DC09 076A	232 kW	25	40	47	50
DC09 076A	243 kW	26	41	47	50
DC09 076A	257 kW	28	42	47	50
DC09 077A	232 kW	43	47	47	47
DC09 077A	243 kW	44	48	48	48
DC09 077A	257 kW	45	50	50	50
DC09 077A	276 kW	45	51	52	52



Engine type	Engine power	Maximum intake air temperature (°C), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC09 077A	294 kW	46	52	53	54
DC09 078A	202 kW	42	46	47	46
DC09 078A	202 kW	39	45	47	-
DC09 080A	202 kW	42	46	47	46
DC09 080A	202 kW	39	45	47	-
DC09 083A	243 kW	44	48	48	48
DC09 083A	257 kW	45	50	50	50
DC09 083A	276 kW	45	51	52	52
DC09 083A	294 kW	46	52	53	54
DC09 083A	232 kW	43	47	47	47
DC09 084A/384A	202 kW	57	58	56	49
DC09 085A/385A	232 kW	45	47	45	44
DC09 085A/385A	243 kW	45	50	47	45
DC09 085A/385A	257 kW	45	53	49	47
DC09 086A/386A	276 kW	45	56	52	49
DC09 086A/386A	294 kW	45	56	54	51
DC09 087A/387A	202 kW	44	50	51	-
DC09 089A/389A	237 kW	45	53	57	-
DC13 074A	257 kW	30	36	41	44
DC13 074A	294 kW	33	40	44	47
DC13 074A	331 kW	34	44	47	49
DC13 074A	368 kW	35	48	49	51
DC13 076A	257 kW	24	32	32	39
DC13 076A	294 kW	26	34	36	43
DC13 076A	331 kW	26	35	41	46



Engine type	Engine power	Maximum intake air temperature (°C), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC13 077A	294 kW	42	47	50	50
DC13 077A	331 kW	43	50	53	52
DC13 077A	368 kW	43	51	54	53
DC13 077A	405 kW	43	47	54	54
DC13 078A	264 kW	37	42	48	-
DC13 080A	264 kW	34	42	50	-
DC13 081A	257 kW	41	45	49	50
DC13 081A	283 kW	39	46	51	-
DC13 082A	283 kW	34	42	49	-
DC13 083A	294 kW	40	43	43	43
DC13 083A	331 kW	40	45	46	45
DC13 083A	368 kW	40	47	47	47
DC13 083A	405 kW	40	48	47	48
DC13 084A/384A	294 kW	31	37	38	38
DC13 084A/384A	331 kW	33	39	42	40
DC13 085A/385A	368 kW	34	42	46	42
DC13 085A/385A	405 kW	34	43	49	49 ¹
DC13 087A	257 kW	33	42	39	37
DC13 087A/387A	257 kW	31	41	39	-
DC13 087A/387A	283 kW	33	44	42	-
DC13 091A	257 kW	36	40	42	42
DC13 091A	294 kW	38	44	44	43
DC13 091A	331 kW	38	48	45	45
DC13 091A	368 kW	39	47	45	46
DC16 074A	405 kW	43	47	49	42



Engine type	Engine power	Maximum intake air temperature (°C), engine speed (rpm)			
		1,200 rpm	1,500 rpm	1,800 rpm	2,100 rpm
DC16 074A	478 kW	43	51	51	45
DC16 074A	515 kW	43	52	52	47
DC16 076A	368 kW	30	45	38	43 ¹
DC16 076A	405 kW	30	46	40	45 ¹
DC16 076A	425 kW	30	46	41	47 ¹
DC16 077A	405 kW	33	41	46	52
DC16 077A	478 kW	33	43	48	53
DC16 077A	515 kW	33	43	48	53
DC16 083A	405 kW	34	41	44	46
DC16 083A	478 kW	34	45	47	49
DC16 083A	515 kW	34	45	47	49
DC16 084A/384A	405 kW	40	40	40	47
DC16 084A/384A	478 kW	40	46	44	50
DC16 084A/384A	493 kW	40	48	45	51
DC16 085A	566 kW	33	45	49	47 ²
DC16 086A	566 kW	34	41	45	46

1. 1,900 rpm.

2. 2,000 rpm.



Single-speed engines

Table of intake air maximum temperature downstream of charge air cooler in °C for single-speed engines at full engine power according to power level PRP (Prime power), ESP (Maximum stand-by power) or COP (Continuous power).

Ambient conditions: 25°C, 1,013 mbar.

Note:

Check the temperature of the engine intake air when the installation is complete.

Diesel engines

Engine type	Engine power	Maximum intake air temperature (°C), engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC09 071A	226-251 kW/250-275 kVA	50	-	50	-
DC09 071A	248-273 kW/275-300 kVA	50	-	50	-
DC09 071A	267-292 kW/300-325 kVA	50	-	50	-
DC09 071A	289-313 kW/325-350 kVA	50	-	50	-
DC09 072A	226-276 kW/250-303 kVA	47	49	49	51
DC09 072A	248-300 kW/275-330 kVA	49	51	51	52
DC09 072A	267-321 kW/300-358 kVA	51	52	52	53
DC09 072A	289-358 kW/325-400 kVA	52	53	53	54
DC09 073A	226-276 kW/250-303 kVA	48	50	50	51
DC09 073A	248-300 kW/275-330 kVA	49	52	51	51
DC09 073A	267-321 kW/300-358 kVA	51	52	51	50
DC09 073A	289-358 kW/325-400 kVA	52	53	50	52
DC13 071A	325-371 kW/364-409 kVA	48	-	51	-



Engine type	Engine power	Maximum intake air temperature (°C), engine speed (rpm)			
		1,500		1,800	
		PRP	ESP	PRP	ESP
DC13 071A	364-371 kW/409-409 kVA	48	-	51	-
DC13 072A	326-406 kW/365-450 kVA	40	43	48	49
DC13 072A	365-449 kW/410-500 kVA	44	48	49	50
DC13 072A	403-487 kW/455-550 kVA	48	50	50	50
DC13 072A	438-487 kW/500-550 kVA	50	50	50	50
DC13 073A	326-406 kW/365-450 kVA	39	41	46	47
DC13 073A	365-449 kW/410-500 kVA	41	42	47	47
DC13 073A	403-487 kW/455-550 kVA	42	43	47	48
DC13 073A	438-487 kW/500-550 kVA	43	45	47	48
DC16 071A	438-483 kW/500-550 kVA	50	-	52	-
DC16 071A	480-483 kW/550-550 kVA	50	-	52	-
DC16 072A	536-632 kW/600-715 kVA	44	46	46	49
DC16 072A	578-678 kW/650-770 kVA	46	48	48	51
DC16 072A	621-704 kW/700-800 kVA	47	48	49	51
DC16 078A	534-587 kW/600-660 kVA	46	47	48	49
DC16 078A	576-634 kW/650-715 kVA	47	48	49	50
DC16 078A	620-680 kW/700-770 kVA	48	51	49	49
DC16 093A	447-496 kW/501-567 kVA	44	45	45	45
DC16 093A	486-538 kW/550-613 kVA	45	45	45	46
DC16 093A	529-585 kW/600-668 kVA	45	47	46	47
DC16 093A	558-634 kW/640-720 kVA	45	48	47	53



Gas engines

Engine type	Engine power	Maximum intake air temperature (°C), engine speed (rpm)			
		1,500		1,800	
		PRP	COP	PRP	COP
OC16 071A	333-372 kW/364-409 kVA	43	42	42	40
OC16 071A	372-411 kW/409-455 kVA	47	42	45	40
OC16 071A	407-426 kW/455-477 kVA	50	42	46	40



Exhaust flow and exhaust gas temperature

All-speed engines

Table for determining the preliminary and final inside diameter of the exhaust pipe (Dp) in mm for all-speed engines at full engine power according to ICFN and IFN.

Ambient conditions: 25°C, 1,013 mbar.

The Dimensioning the exhaust system section in *01:04 Exhaust system* describes how to calculate the diameter of the exhaust pipes.

Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
DC09 074A	202 kW	1,200	18	443	90	100	110	120	125	130
		1,500	22	381	100	105	120	125	135	140
		1,800	25	358	105	110	125	135	140	145
		2,100	28	387	110	120	130	140	145	155
DC09 074A	232 kW	1,200	18	472	90	100	115	120	125	130
		1,500	24	399	100	110	125	130	140	145
		1,800	27	387	105	115	130	140	145	150
		2,100	29	430	110	120	135	145	150	155
DC09 074A	243 kW	1,200	18	482	95	100	115	120	125	130
		1,500	24	422	105	110	125	135	140	145
		1,800	27	406	105	115	130	140	145	150
		2,100	29	450	110	125	135	145	150	160
DC09 074A	257 kW	1,200	19	492	95	105	115	125	130	135
		1,500	24	454	105	115	125	135	140	145
		1,800	27	436	110	120	130	140	145	155



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		2,100	29	477	115	125	135	145	155	160
DC09 074A	276 kW	1,200	19	502	95	105	115	125	130	135
		1,500	24	511	105	115	130	135	145	150
		1,800	27	483	110	120	135	140	150	155
		2,100	30	503	115	125	140	150	155	160
DC09 074A	294 kW	1,200	19	502	95	105	115	125	130	135
		1,500	24	529	105	115	130	135	145	150
		1,800	27	533	110	120	135	145	150	155
		2,100	30	520	115	125	140	150	155	165
DC09 076A	202 kW	1,200	15	406	85	95	105	110	115	120
		1,500	23	400	100	110	120	130	135	140
		1,800	26	418	105	115	130	135	145	150
		2,100	30	421	115	125	135	145	155	160
DC09 076A	232 kW	1,200	16	414	85	95	105	115	120	125
		1,500	23	412	100	110	120	130	135	145
		1,800	27	462	110	120	130	140	150	155
		2,100	30	481	115	125	140	150	155	160
DC09 076A	243 kW	1,200	16	417	85	95	105	115	120	125
		1,500	23	425	100	110	125	130	140	145
		1,800	27	482	110	120	135	140	150	155
		2,100	30	490	115	125	140	150	155	160
DC09 076A	257 kW	1,200	17	423	90	100	110	115	120	125
		1,500	24	446	105	115	125	135	140	145
		1,800	27	508	110	120	135	145	150	155



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		2,100	30	499	115	125	140	150	155	160
DC09 077A	232 kW	1,200	16	509	90	100	110	115	120	125
		1,500	20	451	95	105	115	125	130	135
		1,800	23	451	100	110	125	130	140	145
		2,100	24	508	105	115	130	135	145	150
DC09 077A	243 kW	1,200	16	512	90	100	110	115	120	125
		1,500	21	468	100	110	120	130	135	140
		1,800	23	464	100	110	125	135	140	145
		2,100	25	514	105	115	130	140	145	150
DC09 077A	257 kW	1,200	17	516	90	100	110	120	125	130
		1,500	21	490	100	110	120	130	135	140
		1,800	24	481	105	115	125	135	140	150
		2,100	25	520	110	115	130	140	145	150
DC09 077A	276 kW	1,200	17	520	90	100	110	120	125	130
		1,500	22	520	100	110	125	130	140	145
		1,800	25	502	105	115	130	140	145	150
		2,100	26	528	110	120	135	140	150	155
DC09 077A	294 kW	1,200	17	524	90	100	110	120	125	130
		1,500	22	532	100	110	125	135	140	145
		1,800	25	511	105	115	130	140	145	150
		2,100	27	530	110	120	135	145	150	155
DC09 078A	202 kW	1,200	15	503	85	95	105	115	120	125
		1,500	19	446	95	105	115	120	130	135
		1,800	22	429	100	110	120	130	135	140



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		2,100	23	451	100	110	125	130	140	145
DC09 078A	202 kW	1,200	13	469	80	90	100	105	110	115
		1,500	19	436	95	105	115	120	130	135
		1,800	22	429	100	110	120	130	135	140
DC09 080A	202 kW	1,200	15	503	85	95	105	115	120	125
		1,500	19	446	95	105	115	120	130	135
		1,800	21	429	95	105	120	125	135	140
		2,100	23	451	100	110	125	130	140	145
DC09 080A	202 kW	1,200	13	469	80	90	100	105	110	115
		1,500	19	436	95	105	115	120	130	135
		1,800	22	429	100	110	120	130	135	140
DC09 083A	232 kW	1,200	16	509	90	100	110	115	120	125
		1,500	20	451	95	105	115	125	130	135
		1,800	23	451	100	110	125	130	140	145
		2,100	24	508	105	115	130	135	145	150
DC09 083A	243 kW	1,200	16	512	90	100	110	115	120	125
		1,500	21	468	100	110	120	130	135	140
		1,800	23	464	100	110	125	135	140	145
		2,100	25	514	105	115	130	140	145	150
DC09 083A	257 kW	1,200	17	516	90	100	110	120	125	130
		1,500	21	490	100	110	120	130	135	140
		1,800	24	481	105	115	125	135	140	150
		2,100	25	520	110	115	130	140	145	150
DC09 083A	276 kW	1,200	17	520	90	100	110	120	125	130



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		1,500	22	520	100	110	125	130	140	145
		1,800	25	502	105	115	130	140	145	150
		2,100	26	528	110	120	135	140	150	155
DC09 083A	294 kW	1,200	17	524	90	100	110	120	125	130
		1,500	22	532	100	110	125	135	140	145
		1,800	25	511	105	115	130	140	145	150
		2,100	27	530	110	120	135	145	150	155
DC09 084A/ 384A	202 kW	1,200	13	467	80	90	100	105	110	115
		1,500	16	405	85	95	105	115	120	125
		1,800	18	397	90	100	110	120	125	130
		2,100	19	436	95	105	115	120	130	135
DC09 085A/ 385A	232 kW	1,200	16	450	85	95	105	115	120	125
		1,500	19	395	90	100	115	120	125	130
		1,800	22	375	100	105	120	125	135	140
		2,100	24	406	100	110	125	135	140	145
DC09 085A/ 385A	243 kW	1,200	16	452	90	95	105	115	120	125
		1,500	20	403	95	105	115	125	130	135
		1,800	22	380	100	105	120	125	135	140
		2,100	25	415	105	115	125	135	140	150
DC09 085A/ 385A	257 kW	1,200	16	466	90	95	110	115	120	125
		1,500	21	411	95	105	120	125	130	140
		1,800	23	388	100	110	120	130	135	140
		2,100	25	426	105	115	125	135	140	150
DC09 086A/	276 kW	1,200	16	478	90	95	110	115	120	125



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
386A		1,500	22	421	100	110	120	130	135	140
		1,800	24	404	100	110	125	135	140	145
		2,100	26	440	105	115	130	140	145	150
DC09 086A/ 386A	294 kW	1,200	16	478	90	95	110	115	120	125
		1,500	22	419	100	110	120	130	135	140
		1,800	25	408	105	115	125	135	140	145
		2,100	27	448	110	120	130	140	150	155
DC09 087A/ 387A	202 kW	1,200	11	458	75	85	95	100	105	110
		1,500	15	403	85	90	105	110	115	120
		1,800	18	398	90	100	110	120	125	130
DC09 089A/ 389A	237 kW	1,200	11	463	75	85	95	100	105	110
		1,500	16	405	85	95	105	115	120	125
		1,800	20	414	95	105	115	125	130	135
DC13 074A	257 kW	1,200	21	442	100	105	120	125	135	140
		1,500	27	413	110	120	130	140	145	150
		1,800	30	411	115	125	135	145	150	160
		2,100	34	426	120	130	145	155	160	165
DC13 074A	294 kW	1,200	23	452	100	110	125	130	140	145
		1,500	29	454	115	125	135	145	150	160
		1,800	32	458	115	130	140	150	160	165
		2,100	35	470	125	135	145	155	165	170
DC13 074A	331 kW	1,200	24	457	105	115	125	135	140	145
		1,500	31	483	115	125	140	150	155	165
		1,800	33	498	120	130	145	155	160	170



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		2,100	36	509	125	135	150	160	170	175
DC13 074A	368 kW	1,200	24	459	105	115	125	135	140	145
		1,500	32	506	120	130	145	155	160	165
		1,800	34	535	125	135	150	160	165	170
		2,100	37	546	130	140	155	165	170	180
DC13 076A	257 kW	1,200	19	431	95	105	115	120	130	135
		1,500	29	448	110	120	135	145	150	160
		1,800	31	472	115	125	140	150	155	165
		2,100	35	477	125	135	145	155	165	170
DC13 076A	294 kW	1,200	20	437	95	105	115	125	130	135
		1,500	30	468	115	125	140	145	155	160
		1,800	32	502	120	130	145	155	160	165
		2,100	36	504	125	135	150	160	170	175
DC13 076A	331 kW	1,200	20	437	95	105	115	125	130	135
		1,500	31	477	115	125	140	150	155	165
		1,800	34	522	125	135	145	155	165	170
		2,100	38	541	130	140	155	165	175	180
DC13 077A	294 kW	1,200	21	510	100	110	120	130	135	140
		1,500	28	453	110	120	135	145	150	155
		1,800	31	438	115	125	140	150	155	160
		2,100	33	451	120	130	145	150	160	165
DC13 077A	331 kW	1,200	21	513	100	110	120	130	135	140
		1,500	29	430	110	120	135	145	150	155
		1,800	33	460	120	130	145	155	160	165



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		2,100	35	487	125	135	150	155	165	170
DC13 077A	368 kW	1,200	22	513	100	110	125	130	140	145
		1,500	31	453	115	125	140	150	155	160
		1,800	34	500	120	135	145	155	165	170
		2,100	36	521	125	135	150	160	170	175
DC13 077A	405 kW	1,200	22	514	100	110	125	130	140	145
		1,500	32	500	120	130	145	155	160	165
		1,800	35	531	125	135	150	160	165	175
		2,100	36	551	125	140	150	160	170	175
DC13 078A	264 kW	1,200	15	451	85	95	105	110	120	120
		1,500	22	407	100	110	120	130	135	140
		1,800	30	403	110	125	135	145	150	160
DC13 080A	264 kW	1,200	16	461	90	95	105	115	120	125
		1,500	23	419	100	110	125	130	140	145
		1,800	30	411	115	125	135	145	150	160
DC13 081A	257 kW	1,200	18	490	95	100	115	120	125	130
		1,500	23	421	100	110	125	130	140	145
		1,800	28	395	110	120	130	140	150	155
		2,100	32	375	115	125	140	145	155	160
DC13 081A	283 kW	1,200	16	472	90	95	110	115	120	125
		1,500	24	430	105	115	125	135	140	145
		1,800	30	411	115	125	135	145	150	160
DC13 082A	283 kW	1,200	17	477	90	100	110	120	125	130
		1,500	25	437	105	115	125	135	145	150



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		1,800	31	414	115	125	140	145	155	160
DC13 083A	294 kW	1,200	21	510	100	110	120	130	135	140
		1,500	28	453	110	120	135	145	150	155
		1,800	31	438	115	125	140	150	155	160
		2,100	33	451	120	130	145	150	160	165
DC13 083A	331 kW	1,200	20	522	100	105	120	125	135	140
		1,500	28	480	110	120	135	145	150	155
		1,800	33	473	120	130	145	155	160	165
		2,100	34	485	120	130	145	155	165	170
DC13 083A	368 kW	1,200	21	521	100	110	120	130	135	140
		1,500	30	497	115	125	140	150	155	160
		1,800	34	510	120	135	145	155	165	170
		2,100	36	518	125	135	150	160	170	175
DC13 083A	405 kW	1,200	21	519	100	110	120	130	135	140
		1,500	31	510	120	130	140	150	160	165
		1,800	35	539	125	135	150	160	165	175
		2,100	37	540	130	140	155	165	170	180
DC13 084A/ /384A	294 kW	1,200	18	482	95	100	115	120	125	130
		1,500	25	390	105	115	125	135	140	145
		1,800	30	347	110	120	135	140	150	155
		2,100	31	404	115	125	140	145	155	160
DC13 084A/ /384A	331 kW	1,200	19	489	95	105	115	125	130	135
		1,500	26	422	105	115	130	140	145	150
		1,800	32	372	115	125	140	145	155	160



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		2,100	33	446	120	130	145	150	160	165
DC13 085A/ 385A	368 kW	1,200	19	491	95	105	115	125	130	135
		1,500	27	449	110	120	130	140	150	155
		1,800	34	401	120	130	145	150	160	165
		2,100	34	478	120	130	145	155	165	170
DC13 085A/ 385A	405 kW	1,200	19	491	95	105	115	125	130	135
		1,500	28	455	110	120	135	145	150	155
		1,800	35	446	120	130	145	155	165	170
		1,900	36	455	125	135	150	160	165	170
DC13 087A/ 387A	257 kW	1,200	16	399	85	95	105	115	120	125
		1,500	25	344	100	110	125	130	140	145
		1,800	28	354	105	115	130	140	145	150
DC13 087A/ 387A	283 kW	1,200	17	416	90	100	110	115	120	125
		1,500	26	359	105	115	125	135	140	145
		1,800	29	370	110	120	135	140	150	155
DC13 087A/ 387A	257 kW	1,200	17	413	90	100	110	115	120	125
		1,500	25	351	100	110	125	135	140	145
		1,800	28	354	105	115	130	140	145	150
		2,100	29	401	110	120	135	145	150	155
DC13 091A	257 kW	1,200	19	458	95	105	115	125	130	135
		1,500	25	367	105	110	125	135	140	145
		1,800	31	321	110	120	135	145	150	155
		2,100	34	337	115	125	140	150	155	160
DC13 091A	294 kW	1,200	21	483	100	110	120	130	135	140



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		1,500	28	382	110	120	130	140	145	155
		1,800	33	357	115	125	140	150	155	160
		2,100	35	382	120	130	145	155	160	165
DC13 091A	331 kW	1,200	21	500	100	110	120	130	135	140
		1,500	31	416	115	125	140	145	155	160
		1,800	33	404	115	130	140	150	160	165
		2,100	36	417	120	135	145	155	165	170
DC13 091A	368 kW	1,200	21	509	100	110	120	130	135	140
		1,500	30	495	115	125	140	150	155	160
		1,800	34	471	120	130	145	155	165	170
		2,100	37	461	125	135	150	160	170	175
DC16 074A	405 kW	1,200	26	528	110	120	135	140	150	155
		1,500	37	456	125	135	150	160	165	175
		1,800	42	430	130	140	155	165	175	180
		2,100	46	490	140	150	165	175	185	190
DC16 074A	478 kW	1,200	26	528	110	120	135	140	150	155
		1,500	39	497	130	140	155	165	175	180
		1,800	43	503	135	145	160	170	180	185
		2,100	48	529	145	155	170	180	190	195
DC16 074A	515 kW	1,200	26	528	110	120	135	140	150	155
		1,500	40	503	130	140	155	165	175	180
		1,800	43	550	135	150	165	175	180	190
		2,100	48	544	145	155	170	180	190	195
DC16 076A	368 kW	1,200	23	535	105	115	125	135	140	145



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		1,500	40	405	125	140	150	160	170	175
		1,800	42	461	130	145	160	170	175	185
		1,900	47	512	140	150	170	180	185	195
DC16 076A	405 kW	1,200	23	535	105	115	125	135	140	145
		1,500	41	411	130	140	155	165	170	180
		1,800	43	495	135	145	160	170	180	185
		1,900	49	534	145	155	170	180	190	200
DC16 076A	425 kW	1,200	23	535	105	115	125	135	140	145
		1,500	41	416	130	140	155	165	170	180
		1,800	45	502	140	150	165	175	185	190
		1,900	49	545	145	155	170	185	190	200
DC16 077A	405 kW	1,200	25	552	110	120	130	140	145	155
		1,500	35	492	125	135	150	160	165	170
		1,800	42	457	130	145	160	170	175	185
		2,100	47	468	140	150	165	175	185	190
DC16 077A	478 kW	1,200	25	552	110	120	130	140	145	155
		1,500	38	510	130	140	155	165	170	180
		1,800	45	478	135	150	165	175	180	190
		2,100	49	505	145	155	170	180	190	195
DC16 077A	515 kW	1,200	25	552	110	120	130	140	145	155
		1,500	39	512	130	140	155	165	175	180
		1,800	46	485	140	150	165	175	185	190
		2,100	50	515	145	155	170	185	190	200
DC16 083A	405 kW	1,200	24	550	105	115	130	140	145	150



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		1,500	34	497	120	135	145	155	165	170
		1,800	41	451	130	140	155	165	175	180
		2,100	47	448	140	150	165	175	185	190
DC16 083A	478 kW	1,200	24	550	105	115	130	140	145	150
		1,500	38	519	130	140	155	165	170	180
		1,800	44	480	135	145	160	170	180	185
		2,100	49	490	145	155	170	180	190	195
DC16 083A	515 kW	1,200	24	550	105	115	130	140	145	150
		1,500	38	522	130	140	155	165	170	180
		1,800	45	486	135	150	165	175	180	190
		2,100	50	501	145	155	170	180	190	200
DC16 084A/ 384A	405 kW	1,200	25	451	105	115	130	135	145	150
		1,500	29	454	115	125	135	145	150	160
		1,800	33	427	120	130	140	150	160	165
		2,100	41	388	130	140	155	165	170	180
DC16 084A/ 384A	478 kW	1,200	26	443	105	115	130	140	145	150
		1,500	35	478	125	135	145	155	165	170
		1,800	38	464	125	140	150	160	170	175
		2,100	44	439	135	145	160	170	180	185
DC16 084A/ 384A	493 kW	1,200	26	443	105	115	130	140	145	150
		1,500	36	480	125	135	150	160	165	175
		1,800	39	469	130	140	155	165	170	180
		2,100	45	445	135	145	160	170	180	185
DC16 085A	566 kW	1,200	25	521	110	120	130	140	145	150



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
		1,500	41	496	130	145	160	170	175	185
		1,800	48	523	145	155	170	180	190	195
		2,000	50	536	145	155	175	185	190	200



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
DC16 086A	566 kW	1,200	26	441	105	115	130	140	145	150
		1,500	38	493	130	140	155	165	170	175
		1,800	46	511	140	150	165	175	185	190
		2,100	50	521	145	155	170	185	190	200

* ±10% depending on design of intake and exhaust systems.

** Conversion of exhaust gas flow to m³/min according to:

$$Q2 = \frac{(t + 273) \times Q1}{347.72}$$

Q2 = exhaust flow in m³/min.

t = exhaust gas temperature in °C.

Q1 = exhaust flow in kg/min.

Note:

The exhaust gas temperature must be measured approximately 1 metre downstream of the turbocharger. A higher value is obtained when measuring closer to the turbocharger, which deviates from the specified values.



Single-speed engines

Table for determining the preliminary and final inside diameter of the exhaust pipe (Dp) in mm. The table applies to single speed engines at full engine power according to power level PRP (Prime power), ESP (Maximum stand-by power) or COP (Continuous power).

Ambient conditions: 25°C, 1,013 mbar.

The Dimensioning the exhaust system section in *01:04 Exhaust system* describes how to calculate the diameter of the exhaust pipes.

Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
DC09 071A	226-251 kW, PRP	1,500	20	502	95	105	120	125	135	140
		1,800	26	435	105	115	130	140	145	150
DC09 071A	248-273 kW, PRP	1,500	21	507	100	110	120	130	135	140
		1,800	26	460	110	115	130	140	145	150
DC09 071A	267-292 kW, PRP	1,500	22	512	100	110	125	130	140	145
		1,800	26	478	110	120	130	140	145	150
DC09 071A	289-313 kW, PRP	1,500	23	518	105	115	125	135	140	145
		1,800	26	507	110	120	130	140	150	155
DC09 072A	226 kW, PRP	1,500	22	390	100	110	120	130	135	140
		249 kW, ESP	1,500	23	100	110	125	130	140	145
	251 kW, PRP	1,800	27	381	105	115	130	140	145	150
		276 kW, ESP	1,800	28	110	120	135	140	150	155
DC09 072A	248 kW, PRP	1,500	23	427	100	110	125	130	140	145
	273 kW, ESP	1,500	24	471	105	115	125	135	140	145
	273 kW, PRP	1,800	28	426	110	120	135	140	150	155



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
	300 kW, ESP	1,800	28	493	110	120	135	145	150	155
DC09 072A	267 kW, PRP	1,500	24	460	105	115	125	135	140	145
	294 kW, ESP	1,500	24	506	105	115	130	135	145	150
	292 kW, PRP	1,800	28	473	110	120	135	145	150	155
	321 kW, ESP	1,800	28	529	115	125	135	145	155	160
DC09 072A	289 kW, PRP	1,500	24	501	105	115	130	135	145	150
	317 kW, ESP	1,500	25	525	110	120	130	140	145	150
	325 kW, PRP	1,800	28	534	115	125	135	145	155	160
	358 kW, ESP	1,800	29	563	115	125	140	150	155	160
DC09 073A	226 kW, PRP	1,500	23	445	100	110	125	130	140	145
	249 kW, ESP	1,500	24	475	105	115	125	135	140	150
	251 kW, PRP	1,800	28	441	110	120	135	140	150	155
	276 kW, ESP	1,800	28	488	110	120	135	145	150	155
DC09 073A	248 kW, PRP	1,500	24	474	105	115	125	135	140	150
	273 kW, ESP	1,500	24	514	105	115	130	135	145	150
	273 kW, PRP	1,800	28	482	110	120	135	145	150	155
	300 kW, ESP	1,800	28	526	113	125	135	145	155	160
DC09 073A	267 kW, PRP	1,500	24	502	105	115	130	135	145	150
	294 kW, ESP	1,500	25	541	110	120	130	140	145	150
	292 kW, PRP	1,800	28	517	115	125	135	145	150	160
	321 kW, ESP	1,800	28	538	115	125	135	145	155	160
DC09 073A	289 kW, PRP	1,500	24	536	105	115	130	135	145	150
	317 kW, ESP	1,500	26	545	110	120	135	140	150	155
	325 kW, PRP	1,800	29	539	115	125	140	150	155	160



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
	358 kW, ESP	1,800	30	557	115	130	140	150	160	165
DC13 071A	325-371 kW, PRP	1,500	28	476	110	120	135	145	150	155
		1,800	32	502	120	130	145	155	160	165
DC13 071A	364-371 kW, PRP	1,500	28	525	115	125	135	145	155	160
		1,800	32	502	120	130	145	155	160	170
DC13 072A	326 kW, PRP	1,500	26	475	110	120	130	140	145	150
	356 kW, ESP	1,500	28	485	110	120	135	145	150	155
	372 kW, PRP	1,800	33	457	120	130	145	155	160	165
	406 kW, ESP	1,800	35	484	125	135	150	155	165	170
DC13 072A	365 kW, PRP	1,500	29	488	115	125	135	145	155	160
	403 kW, ESP	1,500	32	509	120	130	145	155	160	165
	410 kW, PRP	1,800	35	488	125	135	150	160	165	170
	449 kW, ESP	1,800	36	524	125	135	150	160	170	175
DC13 072A	403 kW, PRP	1,500	32	509	120	130	145	155	160	165
	438 kW, ESP	1,500	34	536	125	135	150	160	165	170
	445 kW, PRP	1,800	36	521	125	135	150	160	170	175
	487 kW, ESP	1,800	38	557	130	140	155	165	175	180
DC13 072A	438 kW, PRP	1,500	34	536	125	135	150	160	165	170
	480 kW, ESP	1,500	36	563	125	140	150	160	170	175
	445 kW, PRP	1,800	36	521	125	135	150	160	170	175
	487 kW, ESP	1,800	38	557	115	125	135	145	155	160
DC13 073A	326 kW, PRP	1,500	30	501	115	125	140	150	155	160
	356 kW, ESP	1,500	32	517	120	130	145	155	160	165
	372 kW, PRP	1,800	35	496	125	135	150	160	165	170



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
	406 kW, ESP	1,800	36	507	125	135	150	160	170	175
DC13 073A	365 kW, PRP	1,500	32	522	120	130	145	155	160	165
	403 kW, ESP	1,500	33	531	120	130	145	155	165	170
	410 kW, PRP	1,800	36	508	125	135	150	160	170	175
	449 kW, ESP	1,800	37	529	130	140	155	165	170	175
DC13 073A	403 kW, PRP	1,500	33	531	120	130	145	155	165	170
	438 kW, ESP	1,500	34	549	125	135	150	160	165	170
	445 kW, PRP	1,800	37	526	125	140	155	165	170	175
	487 kW, ESP	1,800	38	561	130	140	155	165	175	180
DC13 073A	438 kW, PRP	1,500	34	549	125	135	150	160	165	170
	480 kW, ESP	1,500	36	577	130	140	155	165	170	175
	445 kW, PRP	1,800	37	526	125	140	155	165	170	175
	487 kW, ESP	1,800	38	561	130	140	155	165	175	180
DC16 071A	438-483 kW, PRP	1,500	33	524	120	130	145	155	165	170
		1,800	40	529	130	145	160	170	175	185
DC16 071A	480-483 kW, PRP	1,500	35	542	125	135	150	160	165	175
		1,800	40	529	130	145	160	170	175	185
DC16 072A	536 kW, PRP	1,500	37	552	130	140	155	165	170	180
	587 kW, ESP	1,500	40	563	135	145	160	170	175	185
	576 kW, PRP	1,800	43	551	135	150	165	175	180	190
	632 kW, ESP	1,800	47	553	140	155	170	180	190	195
DC16 072A	578 kW, PRP	1,500	39	563	130	145	155	170	175	180
	634 kW, ESP	1,500	42	565	135	145	160	175	180	190
	619 kW, PRP	1,800	46	552	140	155	170	180	185	195



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
	678 kW, ESP	1,800	49	557	145	155	170	185	190	200
DC16 072A	621 kW, PRP	1,500	41	565	135	145	160	170	180	185
	680 kW, ESP	1,500	45	575	140	150	165	180	185	195
	642 kW, PRP	1,800	47	554	140	155	170	180	190	195
	704 kW, ESP	1,800	50	574	145	160	175	185	195	200
DC16 078A	536 kW, PRP	1,500	43	474	135	145	160	170	180	185
	587 kW, ESP	1,500	44	504	135	150	165	175	180	190
	534 kW, PRP	1,800	45	496	140	150	165	175	185	190
	585 kW, ESP	1,800	46	523	140	150	165	175	185	195
DC16 078A	578 kW, PRP	1,500	44	499	135	150	165	175	180	190
	634 kW, ESP	1,500	45	532	140	150	165	175	185	190
	576 kW, PRP	1,800	46	518	140	150	165	175	185	190
	632 kW, ESP	1,800	47	547	140	155	170	180	190	195
DC16 078A	621 kW, PRP	1,500	45	524	140	150	165	175	185	190
	680 kW, ESP	1,500	46	578	140	155	170	180	190	195
	620 kW, PRP	1,800	47	541	140	155	170	180	190	195
	680 kW, ESP	1,800	49	557	145	155	170	185	190	200



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
OC16 071A	333 kW, PRP	1,500	28	473	110	120	135	145	150	155
	330 kW, COP	1,500	28	473	110	120	135	145	150	155
	372 kW, PRP	1,800	32	512	120	130	145	155	160	165
	350 kW, COP	1,800	30	509	115	125	140	150	155	160
OC16 071A	372 kW, PRP	1,500	31	476	115	125	140	150	155	165
	330 kW, COP	1,500	28	473	110	120	135	145	150	155
	411 kW, PRP	1,800	35	515	125	135	150	160	165	175
	350 kW, COP	1,800	30	509	115	125	140	150	155	160
OC16 071A	407 kW, PRP	1,500	34	487	120	130	145	155	165	170
	330 kW, COP	1,500	28	473	110	120	135	145	150	155
	426 kW, PRP	1,800	36	515	125	135	150	160	170	175
	350 kW, COP	1,800	30	509	115	125	140	150	155	160
DC16 093A	451 kW, PRP	1,500	41	413	130	140	155	165	170	180
	496 kW, ESP	1,500	43	452	135	145	160	170	175	185
	447 kW, PRP	1,800	47	392	135	145	160	170	180	190
	492 kW, ESP	1,800	47	427	135	150	165	175	185	190
DC16 093A	486 kW, PRP	1,500	42	439	130	140	155	165	175	180
	535 kW, ESP	1,500	43	501	135	145	160	170	180	185
	489 kW, PRP	1,800	47	425	135	150	165	175	180	190
	538 kW, ESP	1,800	48	465	140	150	165	180	185	195
DC16 093A	529 kW, PRP	1,500	43	494	135	145	160	170	180	185
	582 kW, ESP	1,500	44	552	140	150	165	175	185	190
	532 kW, PRP	1,800	48	458	140	150	165	175	185	195
	585 kW, ESP	1,800	50	500	145	155	170	180	190	200



Engine type	Engine power	Engine speed (rpm)	Exhaust flow (kg/min**)	Exhaust gas temp. (°C*)	Length of the exhaust pipe (metres), inside diameter of the exhaust pipe (mm)					
					5	10	20	30	40	50
DC16 093A	558 kW, PRP	1,500	43	536	135	150	165	175	180	190
	614 kW, ESP	1,500	46	546	140	150	165	180	185	195
	576 kW, PRP	1,800	49	493	145	155	170	180	190	195
	634 kW, ESP	1,800	52	536	150	160	175	185	195	205

* ±10% depending on design of intake and exhaust systems.

** Conversion of exhaust gas flow to m³/min according to:

$$Q2 = \frac{(t + 273) \times Q1}{347.72}$$

Q2 = exhaust flow in m³/min.

t = exhaust gas temperature in °C.

Q1 = exhaust flow in kg/min.

Note:

The exhaust gas temperature must be measured approximately 1 metre downstream of the turbocharger. A higher value is obtained when measuring closer to the turbocharger, which deviates from the specified values.