1	 	L				4					J			0			1			0		
			TC	1				X	×	X												
			Amount	2	X	Х	X															
				Without			Х			Х												
			SCR	LP SCR		Х			X													
				HP SCR	X			Х														
							Net W															
					0,001	0,001	0,001	0,001	0,001	0,001												
					1	_	_	1	-	-	004	PAAD21	9316	SCR TURBO	OCHARGE	ER PRO	TECTION	DAAD0	75623			0,001
					1	1	1	-	-	-	003	PAAD28	4479	Exhaust S	ystem with two	turbo	rharaers	DAAD0	96782			0,001
					_	_	_	1	1	1	002	PAAD28	4475	Exhaust S	ystem				96781			
					1	_	_	1	_	_	001	PAAD21	9883	SCR PIPINO		ie turdo	ocharger	DAAD0				0,001
					1		Quar PER E	ntity		_	SEQ NO	Material		Material Name			Dimension, Occ			Basic Materic		0,001 Weight
										-						[Dimension, Oco	Drawing	0	1aterial Stai 2-Code		GR./NET Main Drw.
					PAAD284485	PAAD284484	PAAD284483	PAAD284482	PAAD284481	PAAD284480	Free space for lic.								s	XXXX Standard	<u> </u>	Н
					PAAD2	PAAD2	PAAD2	PAAD2	PAAD2			A)EAAD09156	57 14.11.	2019			\bigcirc			sil ;021	<u>'</u>	
							Materi	ial ID			Ψo	Number	Drawn	date Num Product W5-8RT-		awn date	Number		n date	Number	Draw	vn date
					(A)			(A)			Ņ	VIN C		W5-8R1-	-flex581-	-E EX At	(haust ogassyst	systell em				
											Units Made	mm kg 30.01.2018	NX dki021		Basic Mate	erial _ Size	Page	Mat	erial	N	et Weight	
					ancing f			OUP 0344)15	+				wwa008		Design Gro	oup	A 3	17 1	erial		Rev.	٨
	 			GENER	AL TOLE	RANCES	ACCOR	DING TO	IS0276	8-mK			mhu019		972	6 10	^{ving} DA	ADU:	16/8	4		A

5

6

7

8

2

A

В

С

D

Е

F

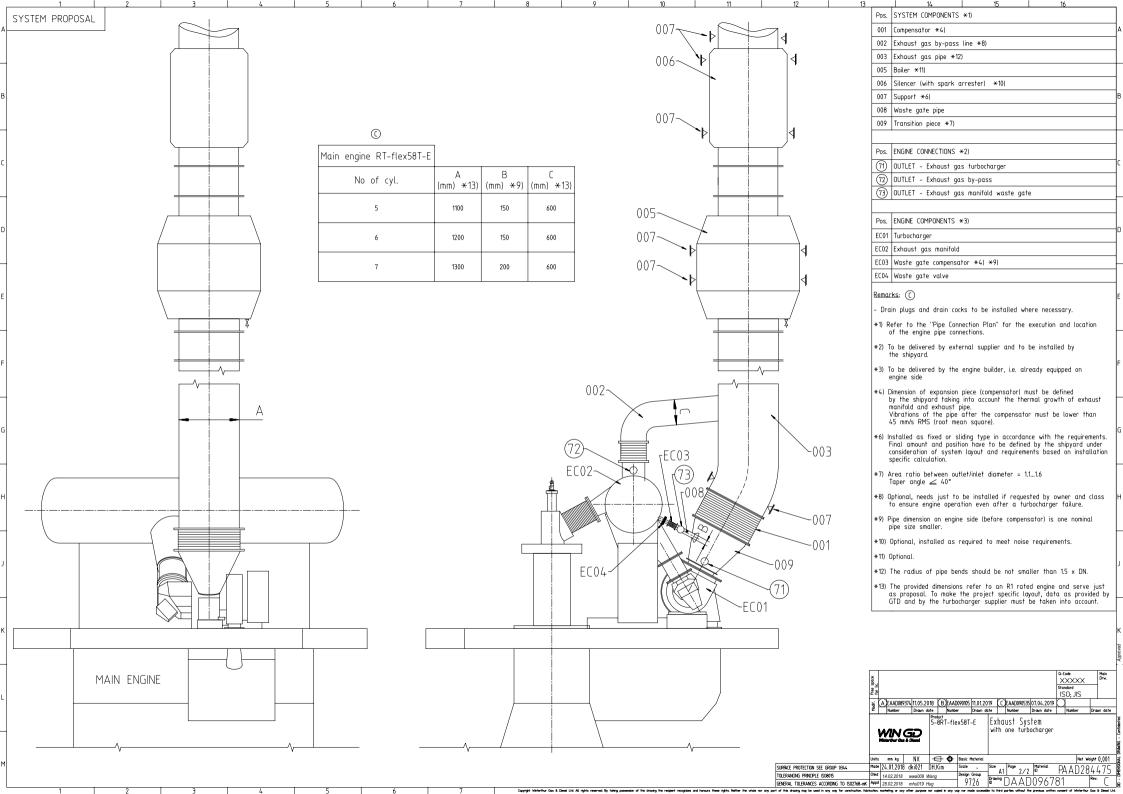
3

4

Copyright Winterthur Gas & Diesel Ltd. All rights reserved. By taking possession of the drawing the recipient recognizes and honours these rights. Neither the whole nor any part of this drawing may be used in any way for construction, fabrication, marketing or any other purpose nor copied in any way nor made accessible to third parties without the previous written consent of Winterthur Gas & Diesel Ltd.

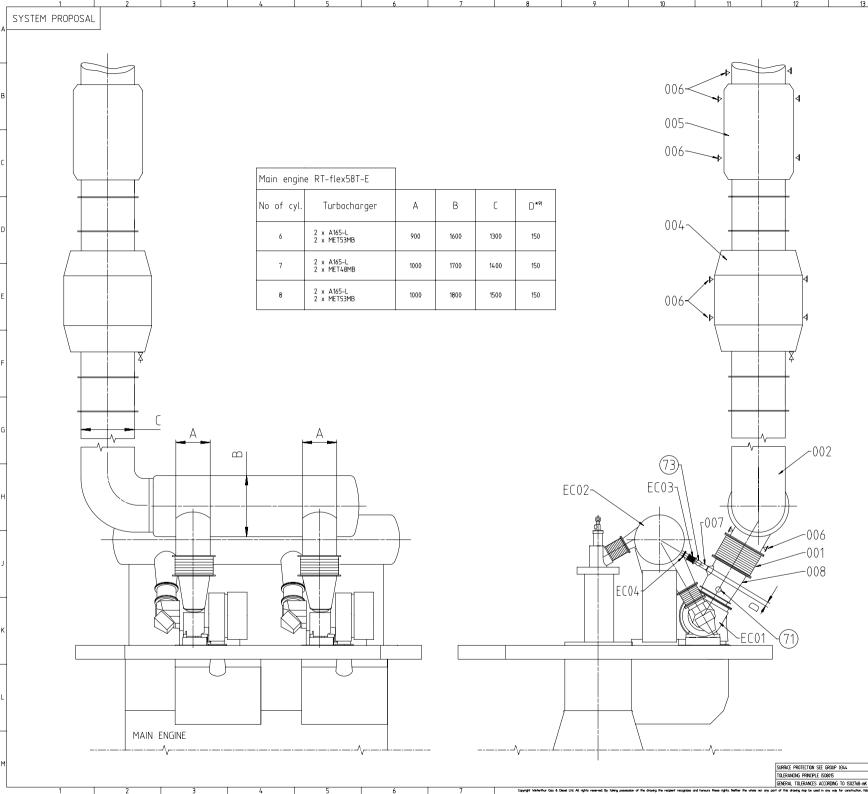
	1	2	3	4		5	6		7	8		_
	Specificatior	ns which must b	e met:									
4	and turbocha turbocharger	on of a by-pass line rger may be requested is installed.	l by owner and class	if only one	(71) (B)	- Exhaust gas - The total ba	ust gas turbocha temperature and ck pressure of t t in the admissib	volume fl he exhaust	ow: according to GT[gas system f:)		
		s to allow engine oper uring normal operation		urbocharger failure.		Design maxim	um (new condition	n) with exh	exhaust gas treatme aust gas treatment	system: 60 mbar		
3		ust gas manifold wast out of connection flanc	2	'Pine Connection Plan''		Operational r	naximum (fouled o	condition) w	rithout exhaust gas rith exhaust gas tre e recommended gas	eatment systèm: 80		В
	- Pipe diameter	according to paramet	er "B" on page 2.			provided in t	he the Marine In	stallation	Manual (MIM) and by a way to avoid gas	GTD.		
	as short as	connection pipe to mair possible to avoid swir flex58T-E	(72)	ust be kept pressure.	_	accumulating. - The piping lay from turboch Thermal expo in MIM, TC sy - Supports (fix components c	yout must conside arger (TC) and m ansion of the ME pecific thermal ex ation points) for leadweight must	er the then nain engine to be cal xpansion an carrying p be installe	rmal expansion and (ME). culated according to re provided by the T iping and exhaust g d in sufficient size	vibration the formula FC supplier. as system and amount.		С
						are not acce - Exhaust gas - Drains in ade exhaust gas - When the noi	ptable. pipes of several equate size and piping.	engines m amount mu bridge wing	forces acting on the ust not be connecte st be installed in th g exceeds the class t be applied.	d. ne		Approved
	(Vinterthur Gas &	Drawn date Numb Product 5-8RT-fle	ex58T-E		n date Number	Drw.	L DRAWING - Confidential
-				SURFACE PROTECTION SEE GROUP 03	44		NX 🗗 🕀	Basic Material Scale _ Design Group	– Size Page Ma – A3 1/2 ID		eight 0,001 34475	IIMENSIONAL
				TOLERANCING PRINCIPLE ISO8015 GENERAL TOLERANCES ACCORDING TI) ISO2768-п	14.02.2010		9726	Drawing DAADO	76781	Rev.] - 00

Copyright Winterthur Cas & Desel Ltd All rights reserved By taking possession of the drawing the recipient recognizes and honours these rights. Neither the whole nor any part of this drawing may be used in any way for construction, fabrication, marketing or any other purpose nor copied in any way nor made accessible to third parties without the previous written consent of Winterthur Cas & Desel Ltd



	1	2	3	4		5		6		7	8	
	Specifications	s which must b	e met:									
A (73)	OUTLET - Exhaus	st gas manifold wast	e gate		(71)	OUTLET – Exha	ust gas	s turbocharger				
	– Size and layou	it of connection flang	e is provided in the	"Pipe Connection Plan"	B	_		ature and volum		-		
	– Pipe diameter	according to paramet	er "B" on page 2.					ssure of the exh e admissible rand		ystem		
			n exhaust gas pipe m l and extensive back			Design maxim	num (ne	w condition) with w condition) with	out exhaust			
3								n (fouled conditio n (fouled conditio				
								out according t Marine Installat				
_		RT-flex58T-E	\bigcirc			- The exhaust accumulating.		must be arrange	d in a way	to avoid gas	es from	
			(73)			from turboch Thermal expo	íarger (ansion (ust consider the TC) and main en of the ME to be thermal expansio	gine (ME). calculated	according to	the formula	
_						components o	deadwei tensions	oints) for carryi ght must be inst s in the piping a	alled in suf	ficient size a	nd ámount.	-
								of several engine	es must not	be connected		
						- Drains in adı exhaust gas		size and amount	must be in	stalled in the	2	
	/							el on the bridge 1B(A)) a silencer			requirement	
						space lic.					Q-Code XXXXX Standard	Main Drw.
Ē	ſ (Free					ISO; JIS	
		$\nabla \Psi / T$				EAAD08937	411.05.20 Drawn di	ate Number [)rawn date	Number Drawn	date Number	Drawn date
-						WIN G Winterthur Gas &	D iesel	Product 5-8RT-flex58T-		ust System two turbocha		
=						Units mm kg	NX	Basic Mo	Iterial		Net	Weight (),()()]
				SURFACE PROTECTION SEE GROUP 034	<i>l</i> +	Made 30.01.2018		DH.Kim Scale Vana Design G	- Size A3	Page Mate		
				GENERAL TOLERANCES ACCORDING TO	IS02768-mK	^{Chkd} 14.02.2018 ^{Appd} 28.02.2018	wwa008 V mhu019 H	Valing 0.7.	26 Drawing [DAAD09	6782	Rev. B

Copyright Writerthur Gas & Diesel Ltd. All rights reserved. By taking possession of the drawing the recipient recognizes and honours these rights. Neither the whole nor any way for construction, flabrication, marketing or any other purpose nor copied in any way nor made accessible to third parties without the previous written consent of Winterthur Gas & Diesel Ltd.



	14	15	16	
Pos.	SYSTEM COMPONENTS	× 1)		
001	Compensator +4)			1
002	Exhaust gas pipe *12)			
004	Boiler ×11)]
005	Silencer (with spark ar	rrester) ×10)		
006	Support *6)			
007	Waste gate pipe			E
008	Transition piece +7)			
Pos.	ENGINE CONNECTIONS *	2)		t
(71)	OUTLET – Exhaust gas	turbocharger		
73	OUTLET – Exhaust gas	: manifold waste gat	e	0
Pos.	ENGINE COMPONENTS *	3)		┝
EC01	Turbocharger			1
EC02	Exhaust gas manifold]
EC03	Waste gate compensat	or *4) *9)		10
EC04	Waste gate valve			
*1) R (*2) T 1 *3) T	in plugs and drain cock efer to the "Pipe Conne of the engine pipe conne o be delivered by exter he shipyard. o be delivered by the e- ngine side	ection Plan" for the ections. mal supplier and to	execution and location be installed by	Ē
*4) [t	imension of expansion p	into account the the pe.	rmal growth of exhaust	F
f (*7) A	astalled as fixed or sliv inal amount and positiv ionsideration of system specific calculation. area ratio between outl "aper angle ∠ 40° ipe dimension on engine	n have to be define layout and requirem et/inlet diameter = 1		6
				ľ
	Optional, installed as re	equired to meet noise	e requirements.	
	Optional.			ŀ
*12)	The radius of pipe benc	is should be not smo	aller than 1.5 x DN.	
				1

[Free space for Ik.													×	lode XX ndard			lain rw.
H	Hodif.	AJEAADO	89374	11.05.20)18 (BEAAD	1090105	13.11.20	18	J					50; J	IS		
	2 Number Drawn date Number							Drawn da	ite 🗌	T	Number	,	Drawn date	۰ (Numb	er	Drawn	date
	Exhaust System with two turbochargers																	
ŀ	Units	mm kg		NX	\in	+ ቀ	Basic M	laterial								Net We	ight (),	001
P	Made	30.01.20	18 d	ci021	DH.Ki	Ŵ	Scale	-	Size		Page	0 / 0	Material	P	۸۸	D28	<i>I. I.</i>	70
P	Chkd	14.02.201	8 w	wa008 V	Vang		Design		Drawing			2/2	P		., .	020	44 Rev.	<u></u>
:	Appd	28.02.201	8 п	hu019 H	lug		97	26	D	L	JA	ΑIJ	096	/82	-		Rev.	В
tric	ation,	4440 (28.02.2018 mhu019 Hug 71.20 10 DAADV70702 D≦ tion, marketing or any other purpose nor copied in any way nor mode accessible to third parties without the previous written consent of Weterthur Gas & Diesek Ltd																



MIDS - WinGD RT-flex58T-E - EXHAUST SYSTEM (DG9726)

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2018-04-25	DRAWING SET	First web upload
2018-05-18	DAAD096781 DAAD096782	System drgs – new revision
2019-01-15	DAAD096781 DAAD096782	System drgs – new revision
2019-09-18	DAAD096781 DAAD096782	System drgs – new revision
2020-09-01	DAAD096784	Main drg – new revision

DISCLAIMER

© Copyright by Winterthur Gas & Diesel Ltd.

All rights reserved. No part of this document may be reproduced or copied in any form or by any means (electronic, mechanical, graphic, photocopying, recording, taping or other information retrieval systems) without the prior written permission of the copyright owner.

THIS PUBLICATION IS DESIGNED TO PROVIDE AN ACCURATE AND AUTHORITATIVE INFORMATION WITH REGARD TO THE SUBJECT-MATTER COVERED AS WAS AVAILABLE AT THE TIME OF PRINTING. HOWEVER, THE PUBLICATION DEALS WITH COMPLICATED TECHNICAL MATTERS SUITED ONLY FOR SPECIALISTS IN THE AREA, AND THE DESIGN OF THE SUBJECT-PRODUCTS IS SUBJECT TO REGULAR IMPROVEMENTS, MODIFICATIONS AND CHANGES. CONSEQUENTLY, THE PUBLISHER AND COPYRIGHT OWNER OF THIS PUBLICATION CAN NOT ACCEPT ANY RESPONSIBILITY OR LIABILITY FOR ANY EVENTUAL ERRORS OR OMISSIONS IN THIS BOOKLET OR FOR DISCREPANCIES ARISING FROM THE FEATURES OF ANY ACTUAL ITEM IN THE RESPECTIVE PRODUCT BEING DIFFERENT FROM THOSE SHOWN IN THIS PUBLICATION. THE PUBLISHER AND COPYRIGHT OWNER SHALL UNDER NO CIRCUMSTANCES BE HELD LIABLE FOR ANY FINANCIAL CONSEQUENTIAL DAMAGES OR OTHER LOSS, OR ANY OTHER DAMAGE OR INJURY, SUFFERED BY ANY PARTY MAKING USE OF THIS PUBLICATION OR THE INFORMATION CONTAINED HEREIN.

Winterthur Gas & Diesel Ltd. Winterthur Gas & Diesel AG. Winterthur Gas & Diesel S.A. Schützenstrasse 3 PO Box 414, CH-8401 Winterthur, Switzerland Tel. +41 (0)52 264 8844 Fax +41 (0)52 264 8866