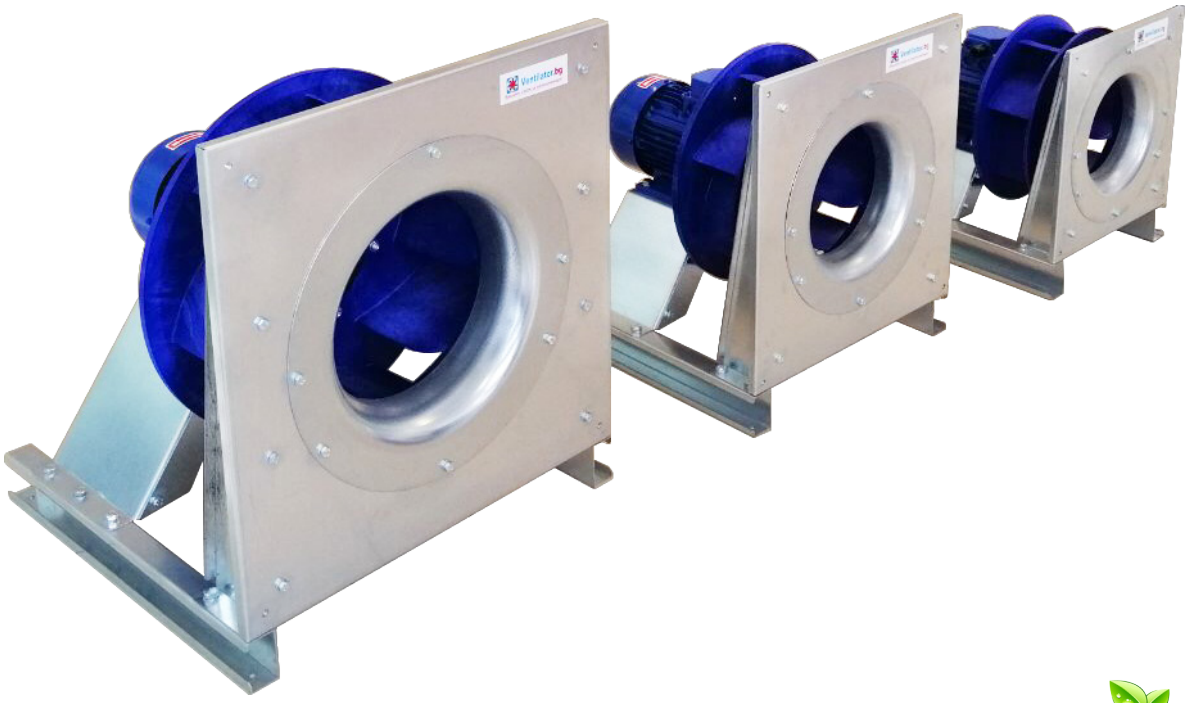
TANGRA®

with care for your comfort!

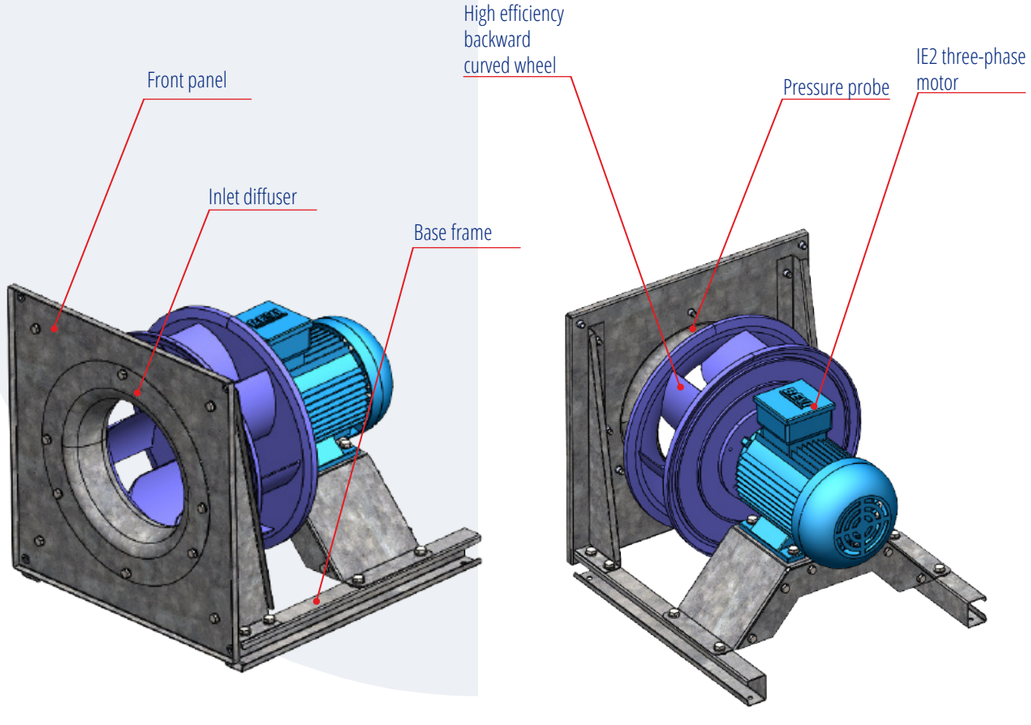
CENTRIFUGAL PLUG FANS

TANGRA PLG

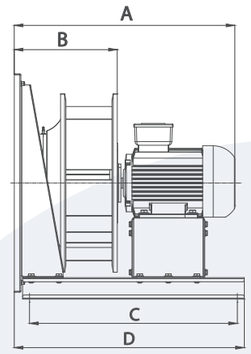


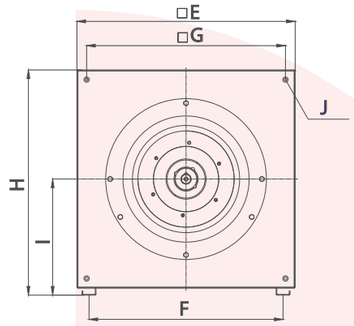
ErP 2018
Compliant

The range of free running centrifugal plug fans TANGRA PLG is designed for installation in air handling units or ventilation boxes intended for transportation of air with higher efficiency and low noise levels at the same time.
TANGRA PLG series utilizes factory balanced high efficiency impellers with backward curved blades, which makes the electric consumption lower.
The range includes fan models with diameter of the wheel between 280 and 500 mm and air volumes from 1300 to 13000 m3/h.
The motors for TANGRA PLG series are 3-phase IE2-standard with PTC and allow frequency inverter control



Technical Characteristics - Dimensions

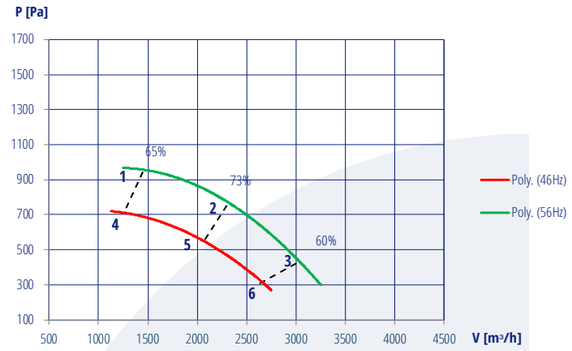




	A	B	C	D	E	F	G	H	I	J
TANGRA PLG 280/2-0,75	457	190	410	467	400	360	364	415	215	4xM8
TANGRA PLG 280/2-1,10	457	190	410	467	400	360	364	415	215	4xM8
TANGRA PLG 280/2-1,50	468	190	420	477	400	360	364	415	215	4xM8
TANGRA PLG 315/2-1,10	478	211	430	487	400	360	364	415	215	4xM8
TANGRA PLG 315/2-1,50	488	211	440	497	400	360	364	415	215	4xM8
TANGRA PLG 315/2-2,20	514	211	460	517	400	360	364	415	215	4xM8
TANGRA PLG 355/4-1,50	538	239	490	550	500	460	464	520	270	4xM8
TANGRA PLG 355/2-2,20	538	239	490	550	500	460	464	520	270	4xM8
TANGRA PLG 355/2-3,00	573	239	530	590	500	460	464	520	270	4xM8
TANGRA PLG 400/4-2,20	601	263	560	620	500	460	464	520	270	4xM8
TANGRA PLG 400/4-3,00	601	263	560	620	500	460	464	520	270	4xM8
TANGRA PLG 400/2-4,00	616	263	580	640	500	460	464	520	270	4xM8
TANGRA PLG 450/4-2,20	637	297	600	664	630	560	574	650	335	4xM8
TANGRA PLG 450/4-3,00	637	297	600	664	630	560	574	650	335	4xM8
TANGRA PLG 450/4-4,00	652	297	610	674	630	560	574	650	335	4xM8
TANGRA PLG 500/4-3,00	671	333	620	684	630	560	574	650	335	4xM8
TANGRA PLG 500/4-4,00	686	333	640	704	630	560	574	650	335	4xM8
TANGRA PLG 500/4-5,50	736	333	680	744	630	560	574	650	335	4xM8

Technical Characteristics - Performance curves and Noise levels

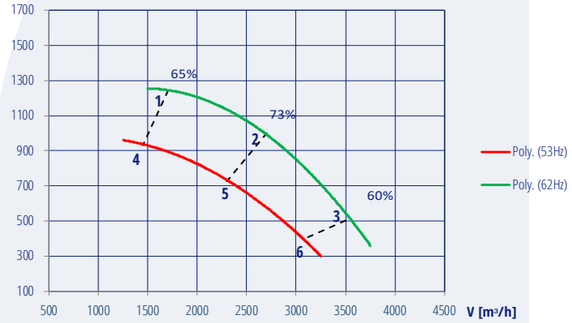
TANGRA PLG 280/2-0,75



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	51	57	69	72	69	68	67	61	77
T1	Outlet	55	63	74	76	79	77	73	64	83
T2	Inlet	41	50	62	68	69	68	65	60	74
T2	Outlet	44	53	67	73	79	76	71	64	82
T3	Inlet	45	52	66	72	70	69	68	63	77
T3	Outlet	45	55	70	76	80	79	74	69	84
T4	Inlet	47	55	66	68	65	65	63	56	73
T4	Outlet	50	59	69	72	76	74	69	60	80
T5	Inlet	39	47	61	65	66	65	62	57	72
T5	Outlet	40	50	66	70	75	73	69	61	79
T6	Inlet	42	50	65	68	67	66	64	60	72
T6	Outlet	43	53	69	72	77	75	73	65	79

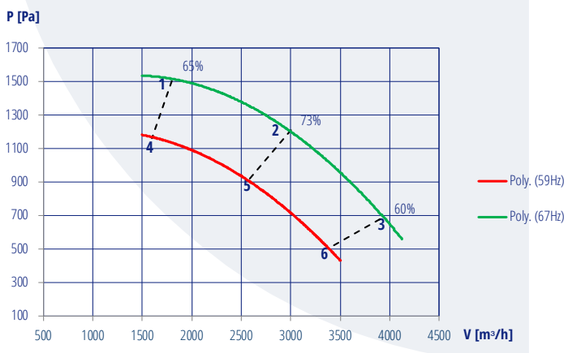
TANGRA PLG 280/2-1,10



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	54	59	71	75	72	72	70	64	80
T1	Outlet	58	66	76	80	82	81	76	69	87
T2	Inlet	44	51	63	72	71	71	69	63	77
T2	Outlet	47	56	68	77	82	8	75	68	86
T3	Inlet	47	54	67	75	72	72	70	66	79
T3	Outlet	47	57	71	79	83	82	77	72	87
T4	Inlet	50	56	69	72	69	68	66	61	76
T4	Outlet	54	62	73	76	79	77	73	64	83
T5	Inlet	40	49	62	67	68	67	65	59	74
T5	Outlet	43	52	67	72	78	75	71	63	81
T6	Inlet	44	52	66	72	70	69	67	63	76
T6	Outlet	45	55	71	75	80	78	74	69	84

TANGRA PLG 280/2-1,50



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	59	66	74	79	75	75	73	66	83
T1	Outlet	61	71	80	84	86	85	80	72	91
T2	Inlet	47	53	67	75	73	74	71	65	80
T2	Outlet	49	58	69	80	85	84	78	71	89
T3	Inlet	50	56	68	78	75	76	73	69	83
T3	Outlet	51	60	72	83	86	85	80	75	90
T4	Inlet	53	59	71	74	71	71	69	63	79
T4	Outlet	57	65	76	79	81	80	75	67	86
T5	Inlet	43	50	63	71	70	70	67	62	76
T5	Outlet	46	55	68	75	81	79	74	67	84
T6	Inlet	49	56	68	77	74	74	72	68	81
T6	Outlet	49	59	73	82	85	84	79	75	89

The curves given are valid for free running fans, or fans incorporated according to instrutions from page 11

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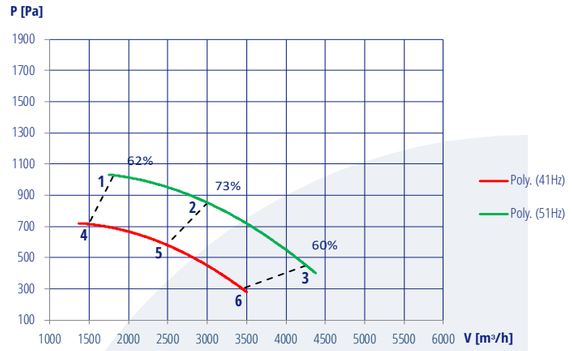
Technical Characteristics - Performance curves and Noise levels

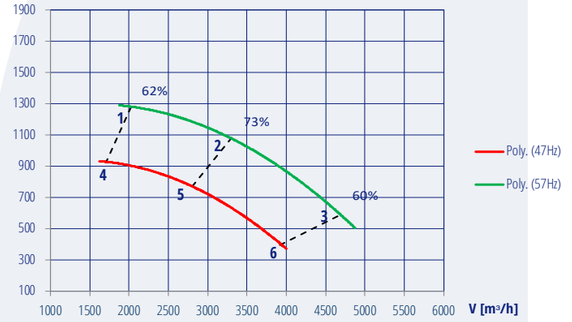
TANGRA PLG 315/2-1,10



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	55	61	72	73	72	72	70	63	79
T1	Outlet	57	67	76	78	82	80	75	67	86
T2	Inlet	39	47	67	69	71	70	68	61	76
T2	Outlet	44	53	71	73	81	78	73	65	84
T3	Inlet	42	51	71	73	72	72	71	65	79
T3	Outlet	45	55	75	77	84	80	76	70	87
T4	Inlet	49	56	65	69	68	68	65	57	74
T4	Outlet	53	61	70	73	78	75	70	61	81
T5	Inlet	35	44	61	65	67	65	62	55	72
T5	Outlet	39	48	65	69	78	73	67	59	80
T6	Inlet	39	49	64	69	68	67	66	60	75
T6	Outlet	41	52	69	72	80	75	71	65	82

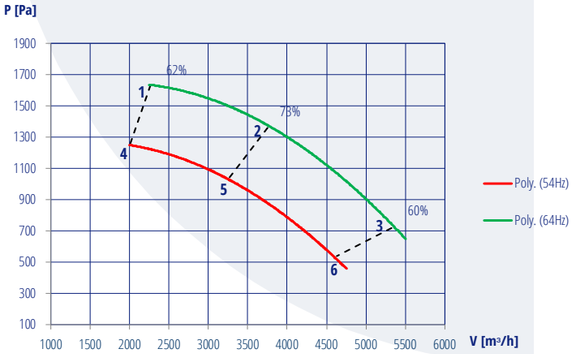
TANGRA PLG 315/2-1,50



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	57	63	75	77	74	74	73	67	82
T1	Outlet	59	69	79	81	84	83	78	71	89
T2	Inlet	42	49	66	72	73	73	71	64	79
T2	Outlet	47	56	71	76	83	81	76	69	86
T3	Inlet	45	52	70	76	75	75	73	68	82
T3	Outlet	48	57	74	79	86	83	79	74	89
T4	Inlet	53	59	70	72	71	71	69	61	78
T4	Outlet	56	65	74	76	81	78	74	66	85
T5	Inlet	38	46	65	68	70	69	66	59	75
T5	Outlet	43	51	69	72	80	76	71	63	83
T6	Inlet	40	49	67	71	71	70	69	63	77
T6	Outlet	43	53	71	75	82	78	74	68	85

TANGRA PLG 315/2-2,20



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	60	67	78	80	77	77	77	70	85
T1	Outlet	61	73	82	85	87	86	82	75	92
T2	Inlet	43	51	65	76	75	76	74	68	82
T2	Outlet	48	58	70	80	86	85	80	73	90
T3	Inlet	49	55	70	79	77	79	77	72	85
T3	Outlet	51	61	74	83	88	87	82	77	92
T4	Inlet	55	61	73	75	73	73	72	66	81
T4	Outlet	58	67	77	79	83	82	78	70	88
T5	Inlet	41	49	65	72	73	73	70	64	78
T5	Outlet	46	55	70	76	83	81	76	68	86
T6	Inlet	44	52	70	75	74	75	73	68	81
T6	Outlet	47	57	74	79	85	83	78	73	89

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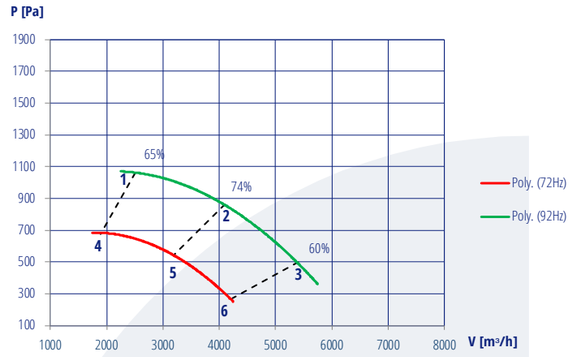
Technical Characteristics - Performance curves and Noise levels

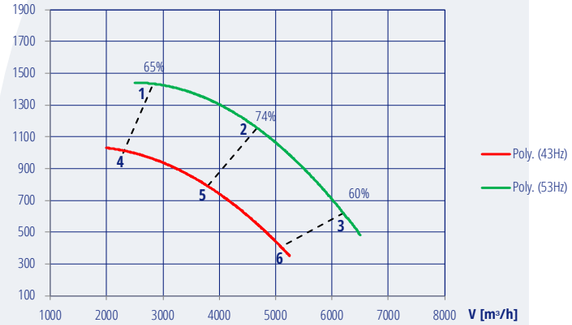
TANGRA PLG 355/4-1,50



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	55	62	72	73	70	71	69	62	79
T1	Outlet	60	68	79	79	82	79	74	67	86
T2	Inlet	40	47	67	68	68	69	66	61	75
T2	Outlet	46	54	72	74	80	77	73	67	83
T3	Inlet	48	56	72	73	70	70	68	66	78
T3	Outlet	50	60	75	77	82	79	75	71	86
T4	Inlet	50	61	65	67	64	65	63	56	73
T4	Outlet	53	64	71	72	76	73	68	61	80
T5	Inlet	35	45	60	64	62	63	61	55	69
T5	Outlet	38	50	65	69	74	70	66	60	77
T6	Inlet	43	55	65	68	64	65	64	62	73
T6	Outlet	44	57	69	72	76	73	70	66	80

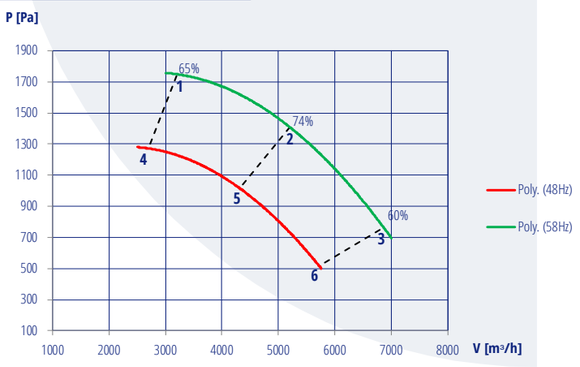
TANGRA PLG 355/2-2,20



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	58	64	78	76	73	75	73	66	83
T1	Outlet	62	71	81	82	86	83	79	71	90
T2	Inlet	42	49	73	72	72	72	70	64	79
T2	Outlet	49	57	76	79	84	81	78	70	88
T3	Inlet	50	58	78	78	75	75	72	69	83
T3	Outlet	53	63	81	82	87	83	80	71	91
T4	Inlet	56	63	73	74	70	71	69	62	79
T4	Outlet	61	69	79	79	82	79	74	67	87
T5	Inlet	43	50	69	69	70	71	69	62	77
T5	Outlet	49	57	74	76	81	79	75	68	85
T6	Inlet	47	56	71	73	69	69	67	66	78
T6	Outlet	49	60	75	76	82	79	73	71	85

TANGRA PLG 355/2-3,00



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	61	65	79	79	78	77	75	68	85
T1	Outlet	62	72	83	85	88	85	81	74	92
T2	Inlet	45	51	68	76	78	75	73	67	82
T2	Outlet	51	60	74	82	88	84	80	73	91
T3	Inlet	52	59	76	81	80	77	74	71	86
T3	Outlet	54	65	80	86	91	86	81	77	93
T4	Inlet	58	64	76	75	72	73	71	64	81
T4	Outlet	62	70	80	81	84	82	77	70	88
T5	Inlet	41	48	70	69	70	71	68	63	77
T5	Outlet	48	56	74	76	82	79	75	69	85
T6	Inlet	49	57	74	75	72	72	70	67	80
T6	Outlet	51	61	77	79	84	81	77	73	88

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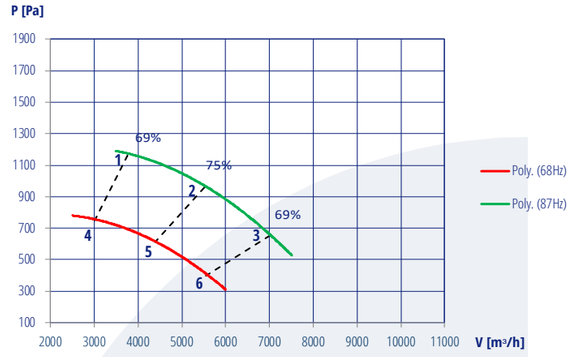
Technical Characteristics - Performance curves and Noise levels

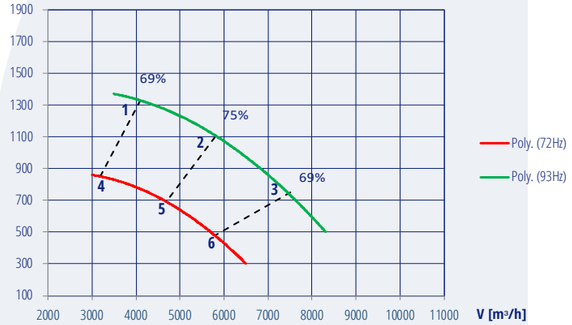
TANGRA PLG 400/4-2,20



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	53	62	73	73	74	73	71	64	80
T1	Outlet	58	67	78	78	86	80	76	68	88
T2	Inlet	43	50	71	69	74	71	69	66	79
T2	Outlet	48	56	76	76	87	79	74	70	89
T3	Inlet	47	56	74	72	74	72	70	73	81
T3	Outlet	51	60	78	78	87	79	76	76	89
T4	Inlet	49	59	66	68	66	68	65	57	74
T4	Outlet	52	63	70	73	78	74	70	61	81
T5	Inlet	36	46	62	64	66	65	63	59	72
T5	Outlet	42	52	68	72	78	72	68	62	80
T6	Inlet	42	52	65	69	67	66	65	67	75
T6	Outlet	45	55	70	74	78	73	71	70	82

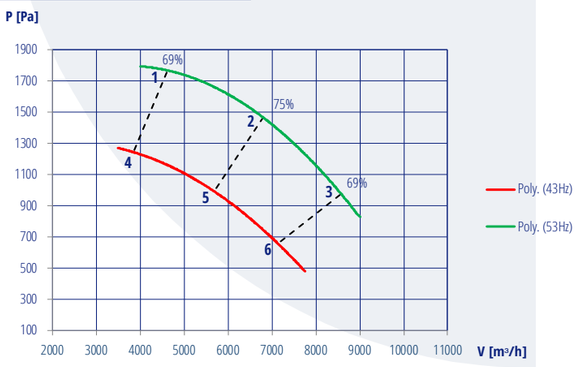
TANGRA PLG 400/4-3,00



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	51	58	74	73	74	75	72	66	81
T1	Outlet	57	64	78	79	86	82	77	70	89
T2	Inlet	44	51	72	71	74	73	71	67	80
T2	Outlet	49	58	77	78	86	81	76	72	89
T3	Inlet	49	57	75	74	75	74	72	73	82
T3	Outlet	53	61	79	81	87	82	77	76	90
T4	Inlet	49	58	67	69	68	69	67	59	75
T4	Outlet	53	63	72	74	80	76	71	63	83
T5	Inlet	37	46	64	67	68	67	65	61	73
T5	Outlet	43	52	70	73	80	74	70	64	82
T6	Inlet	42	51	67	70	68	67	66	68	76
T6	Outlet	45	55	72	75	80	74	71	71	83

TANGRA PLG 400/2-4,00



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	57	63	79	79	76	78	76	70	85
T1	Outlet	62	70	83	84	88	86	82	74	92
T2	Inlet	46	53	76	76	75	76	74	70	83
T2	Outlet	53	61	81	83	87	84	80	75	91
T3	Inlet	52	59	79	79	77	78	75	72	86
T3	Outlet	55	64	83	86	89	85	81	77	93
T4	Inlet	55	63	74	75	74	75	72	65	81
T4	Outlet	60	68	79	80	87	81	77	69	89
T5	Inlet	43	50	71	69	74	72	69	66	79
T5	Outlet	48	57	76	77	87	79	75	70	89
T6	Inlet	48	57	75	73	74	73	71	73	81
T6	Outlet	52	61	78	80	87	81	77	77	90

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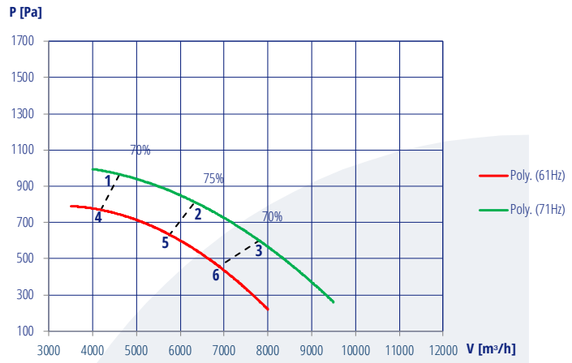
Technical Characteristics - Performance curves and Noise levels

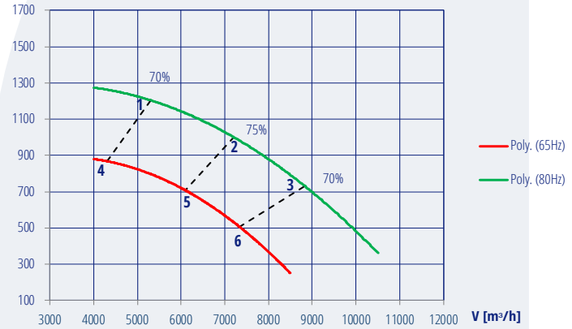
TANGRA PLG 450/4-2,20



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	47	61	71	69	71	71	68	60	77
T1	Outlet	54	65	75	77	83	76	73	64	85
T2	Inlet	39	50	67	69	71	69	66	61	76
T2	Outlet	46	56	72	77	84	75	71	65	85
T3	Inlet	43	53	70	70	72	69	66	66	77
T3	Outlet	48	57	74	78	84	75	72	70	86
T4	Inlet	45	61	66	67	70	68	65	57	75
T4	Outlet	51	65	71	75	81	74	70	61	83
T5	Inlet	36	50	63	66	69	66	63	58	73
T5	Outlet	43	55	69	75	81	72	68	62	83
T6	Inlet	41	53	65	68	70	66	63	62	74
T6	Outlet	44	57	70	75	81	72	69	65	83

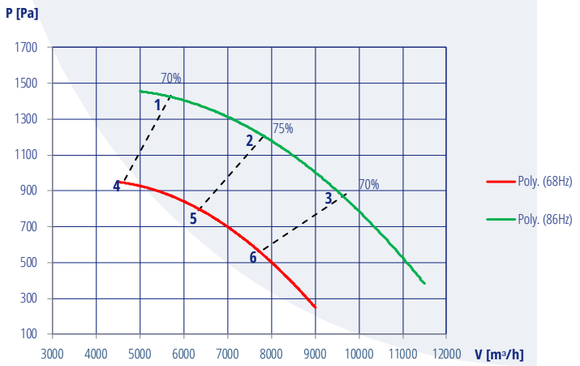
TANGRA PLG 450/4-3,00



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	48	58	73	72	73	74	71	64	80
T1	Outlet	55	64	79	80	85	80	76	68	88
T2	Inlet	41	51	70	70	73	72	69	65	78
T2	Outlet	48	58	75	79	85	79	75	69	88
T3	Inlet	47	57	74	73	74	73	70	70	80
T3	Outlet	51	60	78	81	86	80	76	74	89
T4	Inlet	47	61	69	68	71	70	67	59	76
T4	Outlet	53	66	74	76	82	76	72	63	84
T5	Inlet	37	50	64	67	70	67	64	59	74
T5	Outlet	44	56	70	75	82	74	69	63	84
T6	Inlet	43	54	67	69	71	68	65	65	76
T6	Outlet	47	58	72	77	83	74	71	68	85

TANGRA PLG 450/4-4,00



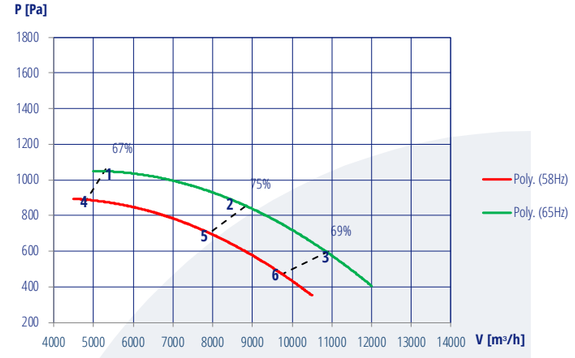
Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	50	60	71	73	74	76	73	66	82
T1	Outlet	57	65	86	82	86	83	79	71	90
T2	Inlet	44	53	74	71	75	74	72	67	81
T2	Outlet	51	60	79	82	86	82	78	72	90
T3	Inlet	50	58	78	74	76	75	72	71	83
T3	Outlet	54	63	82	84	88	83	79	76	91
T4	Inlet	45	59	69	69	71	70	67	59	76
T4	Outlet	51	64	74	76	82	76	72	63	85
T5	Inlet	39	49	68	69	71	69	66	62	76
T5	Outlet	46	56	73	77	84	75	71	66	86
T6	Inlet	43	54	70	70	72	69	66	66	77
T6	Outlet	48	57	74	78	84	75	72	70	86

The curves given are valid for free running fans, or fans incorporated according to instrutions from page 11

Technical Characteristics - Performance curves and Noise levels

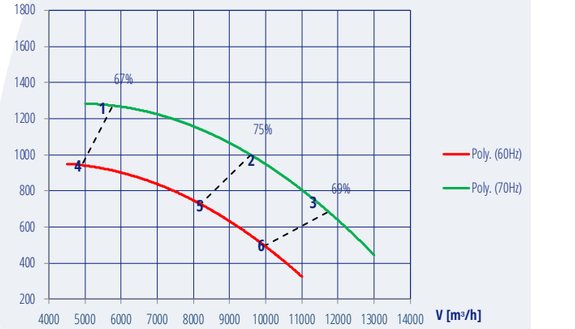
TANGRA PLG 500/4-3,00



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	55	67	72	72	73	74	71	63	80
T1	Outlet	60	71	76	80	83	80	76	67	87
T2	Inlet	40	56	71	71	72	72	69	69	79
T2	Outlet	47	61	77	80	82	78	75	72	86
T3	Inlet	45	59	74	74	73	73	72	77	82
T3	Outlet	50	63	80	82	84	79	78	79	89
T4	Inlet	53	65	70	70	71	72	68	61	78
T4	Outlet	57	69	74	78	81	78	74	65	85
T5	Inlet	39	60	68	69	69	69	67	64	76
T5	Outlet	46	65	73	78	80	76	72	68	84
T6	Inlet	44	62	70	71	70	70	70	72	79
T6	Outlet	48	67	75	80	81	77	75	74	86

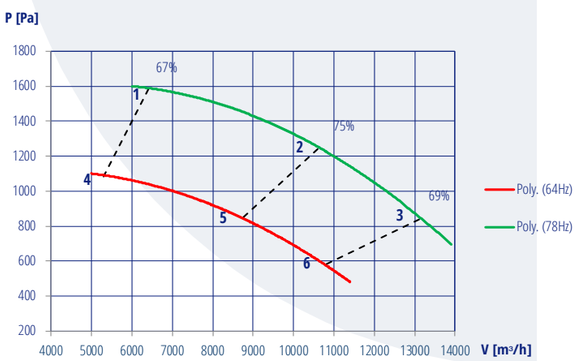
TANGRA PLG 500/4-4,00



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	57	69	75	74	75	77	73	66	82
T1	Outlet	63	73	80	82	85	83	79	70	89
T2	Inlet	42	55	73	71	74	74	71	71	80
T2	Outlet	50	61	78	81	84	80	77	75	88
T3	Inlet	47	59	75	74	75	75	73	78	83
T3	Outlet	52	63	80	83	86	81	79	80	90
T4	Inlet	53	66	70	70	72	73	69	61	79
T4	Outlet	58	70	74	78	82	79	75	66	86
T5	Inlet	39	59	69	70	70	70	68	66	77
T5	Outlet	46	63	74	79	81	77	73	69	85
T6	Inlet	44	62	71	72	71	71	70	73	79
T6	Outlet	49	66	76	80	82	77	76	75	86

TANGRA PLG 500/4-5,50



Acoustic data

		63	125	250	500	1000	2000	4000	8000	LwA
T1	Inlet	58	67	78	76	77	80	76	69	85
T1	Outlet	64	72	82	85	87	85	82	74	92
T2	Inlet	44	54	78	72	77	77	74	74	84
T2	Outlet	54	62	82	83	88	83	80	78	91
T3	Inlet	50	60	82	75	78	78	76	83	87
T3	Outlet	57	65	86	85	90	84	82	84	94
T4	Inlet	55	68	73	72	74	75	72	64	81
T4	Outlet	60	71	77	80	83	81	77	68	88
T5	Inlet	40	56	71	71	72	72	69	68	79
T5	Outlet	47	61	77	80	82	78	75	72	86
T6	Inlet	46	60	75	74	73	73	72	77	82
T6	Outlet	51	63	80	83	84	79	78	79	89

The curves given are valid for free running fans, or fans incorporated according to instrutions from page 11

Technical Characteristics - Motor specification

Model	Motor power kW	Poles	r.p.m. 1/min	Max. Current A	Max. r.p.m. 1/min	Max. Frequency Hz	Fan Weight kg
TANGRA PLG 280/2-0,75	0,75	2	2825	1.9	3192	56	23
TANGRA PLG 280/2-1,10	1,10	2	2850	2,6	3591	64	25
TANGRA PLG 280/2-1,50	1,50	2	2830	3,4	3905	67	29
TANGRA PLG 315/2-1,10	1,10	2	2850	2,6	2907	51	25
TANGRA PLG 315/2-1,50	1,50	2	2830	3,4	3226	57	30
TANGRA PLG 315/2-2,20	2,20	2	2850	5,0	3648	64	34
TANGRA PLG 355/4-1,50	1,50	4	1400	3,4	2632	92	37
TANGRA PLG 355/2-2,20	2,20	2	2850	5,0	3021	53	37
TANGRA PLG 355/2-3,00	3,0	2	2850	6,3	3306	58	44
TANGRA PLG 400/4-2,20	2,20	4	1420	4,8	2471	87	49
TANGRA PLG 400/4-3,00	3,00	4	1430	6,4	2660	93	54
TANGRA PLG 400/2-4,00	4,0	2	2860	8,4	3032	53	50
TANGRA PLG 450/4-2,20	2,20	4	1420	4,8	2016	71	58
TANGRA PLG 450/4-3,00	3,00	4	1430	6,4	2288	80	63
TANGRA PLG 450/4-4,00	4,00	4	1410	8,4	2425	86	68
TANGRA PLG 500/4-3,00	3,00	4	1430	6,4	1859	65	66
TANGRA PLG 500/4-4,00	4,00	4	1410	8,4	1974	70	70
TANGRA PLG 500/4-5,50	5,50	4	1430	10,7	2231	78	81

Adjustable frequency inverters TANFRA FI

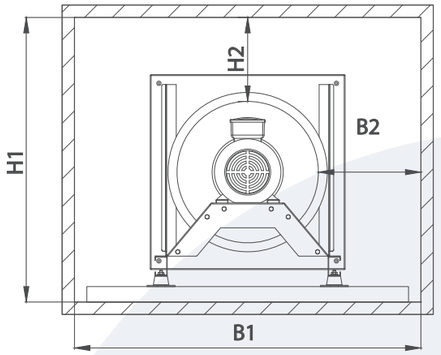
- Three phase frequency inverters with integrated EMC filter
- Housing for intensive industrial operation
- Specially coated radiators for corrosion prevention
- Integrated fan
- Easy mechanical and electrical installation
- Easy servicing, many functions and possibilities

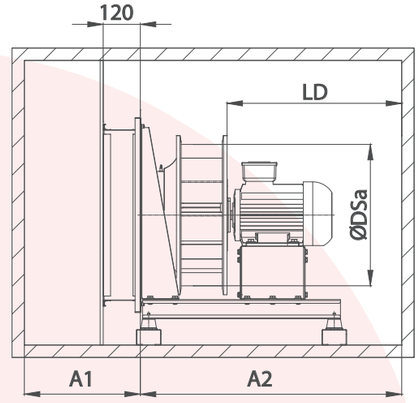
ON/OFF electrical isolation switch

- Range of isolation switch for motors from 20A to 100A
- Rotary padlocking ON/OFF switch
- IP 65 class of protection
- Thermal and weather protection box for external installation

*We reserve the rights to introduce alternations both in design and technical data without prior notice, due to continuous products development

Technical Characteristics - Instructions for incorporation

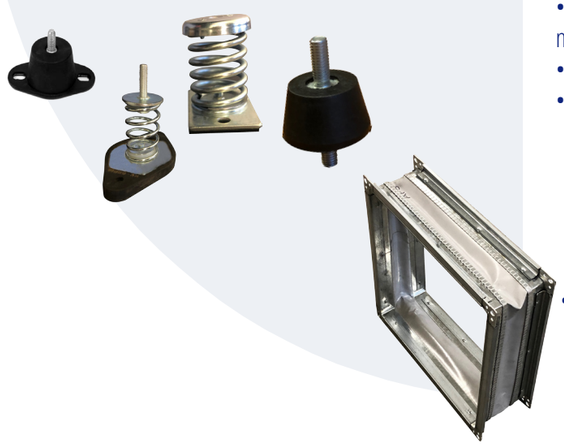




	A1 min	A2 min	B1 min	B2 min	H1 min	H2 min	LD min	ΦDSa
TANGRA PLG 280	265	480	515	115	523	102	286	286
TANGRA PLG 315	280	530	576	128	534	96	320	320
TANGRA PLG 355	300	600	648	144	628	115	360	360
TANGRA PLG 400	323	700	731	163	658	122	406	406
TANGRA PLG 450	349	754	823	183	786	137	457	457
TANGRA PLG 500	377	847	925	206	862	154	514	514

Accessories

Antivibration mounts



- Rubber anti-vibration supports used to reduce vibration and noise;
- Spring anti-vibration mounts used to reduce vibration and noise
- M 8

Flexible connectors

- Reduces vibrations and provides proper airflow direction

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