

DEKLARACJA WŁAŚCIWOŚCI UŻYTKOWYCH
(DECLARATION OF PERFORMANCE)

Nr (No.) **NDWU/1/TUBUS 3 V/2021**

1. Niepowtarzalny kod identyfikacyjny typu wyrobu (Unique identification code of the product-type): TUBUS 3		
2. Zamierzone zastosowanie lub zastosowania: W instalacjach grzewczych w budynkach (Intended use/es: In heating systems in buildings)		
3. Producent (Manufacturer): INSTAL PROJEKT sp. z o. o., ul. Jana Pawła II 12 A, Nowa Wieś k/Włocławka, 87-853 Kruszyn, Polska (INSTAL PROJEKT sp. z o. o., Jana Pawła II 12 A str., Nowa Wieś near Włocławka, 87-853 Kruszyn, Poland.)		
4. System(-y) oceny i weryfikacji stałości właściwości użytkowych (System/s of AVCP): System 3		
5. Norma zharmonizowana (Harmonised standard): EN 442-1:2014		
6. Jednostka lub jednostki notyfikowane (Notified body/ies): INSTYTUT ENERGETYKI. Numer jednostki notyfikowanej (Notification no.): 1452.		
7. Deklarowane właściwości użytkowe (Declared performance/s):		
Zasadnicze charakterystyki	Właściwości użytkowe	Zharmonizowana specyfikacja techniczna
Essential characteristics	Performance	Harmonised technical specification
Reakcja na ogień (Reaction to fire)	A1	EN 442-1:2014
Uwalnianie substancji niebezpiecznych (Release of dangerous substances)	Nie ma (None)	
Szczelność pod działaniem ciśnienia (Pressure tightness)	Brak przecieku przy ciśnieniu 1,3 krotnie większym od maksymalnego ciśnienia [kPa] (No leakage at 1,3 x maximum operating pressure [kPa])	
Temperatura powierzchni (Surface temperature)	Maksymalnie 95 °C (Maximum 95 °C)	
Odporność na działanie ciśnienia (Resistance to pressure)	Brak pęknięć przy ciśnieniu 1,69 krotnie większym od maksymalnego dopuszczalnego ciśnienia roboczego [kPa]. (No breakage at 1,69 x maximum operating pressure [kPa])	
	Maksymalne dopuszczalne ciśnienie robocze: 1000 [kPa] (Maximum operating pressure)	
Nominalna moc cieplna (Φ 50 , Φ 30) (Rated thermal output) (Φ 50 , Φ 30)	Patrz Tabela nr.1 (See Table No.1)	
Moc cieplna w różnych warunkach eksploatacyjnych (charakterystyka) (Thermal output in different operating conditions (characteristic curve))	Patrz Tabela nr.1 (See Table No.1)	
Odporność na korozję (Resistance against corrosion)	Brak korozji po 100 h w wilgoci (No corrosion after 100 h humidity)	
Odporność na słabe uderzenia (Resistance against minor impact)	Klasa 0 (Class 0)	
8. Właściwości użytkowe określonego powyżej wyrobu są zgodne z zestawem deklarowanych właściwości użytkowych. Niniejsza deklaracja właściwości użytkowych wydana zostaje zgodnie z rozporządzeniem (UE) nr 305/2011 na wyłączną odpowiedzialność producenta określonego powyżej. (The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.)		

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Tabela nr 1

(Table no. 1)

Model grzejnika	Normalna moc cieplna [W] (75/65/20°C) ϕ 50	Moc cieplna [W] (55/45/20°C) ϕ 30	Wykładnik n	ΔT	K_M	Moc cieplna w różnych warunkach eksploatacji			
Radiator model	Rated thermal output (75/65/20°C) ϕ 50	Rated thermal output (55/45/20°C) ϕ 30	Index exponent n	ΔT	K_M	Thermal output in different operating conditions (characteristic curve)			
TUB3-020/02V	44	23	1,2616	50	0,31913	$\phi =$	0,31913	x ΔT	1,2616
TUB3-020/03V	67	35	1,2616	50	0,47869	$\phi =$	0,47869	x ΔT	1,2616
TUB3-020/04V	89	47	1,2616	50	0,63825	$\phi =$	0,63825	x ΔT	1,2616
TUB3-020/05V	111	58	1,2616	50	0,79782	$\phi =$	0,79782	x ΔT	1,2616
TUB3-020/06V	133	70	1,2616	50	0,95738	$\phi =$	0,95738	x ΔT	1,2616
TUB3-020/07V	155	82	1,2616	50	1,11694	$\phi =$	1,11694	x ΔT	1,2616
TUB3-020/08V	178	93	1,2616	50	1,27650	$\phi =$	1,27650	x ΔT	1,2616
TUB3-020/09V	200	105	1,2616	50	1,43607	$\phi =$	1,43607	x ΔT	1,2616
TUB3-020/10V	222	117	1,2616	50	1,59563	$\phi =$	1,59563	x ΔT	1,2616
TUB3-020/11V	244	128	1,2616	50	1,75519	$\phi =$	1,75519	x ΔT	1,2616
TUB3-020/12V	266	140	1,2616	50	1,91476	$\phi =$	1,91476	x ΔT	1,2616
TUB3-020/13V	289	151	1,2616	50	2,07432	$\phi =$	2,07432	x ΔT	1,2616
TUB3-020/14V	311	163	1,2616	50	2,23388	$\phi =$	2,23388	x ΔT	1,2616
TUB3-020/15V	333	175	1,2616	50	2,39345	$\phi =$	2,39345	x ΔT	1,2616
TUB3-020/16V	355	186	1,2616	50	2,55301	$\phi =$	2,55301	x ΔT	1,2616
TUB3-020/17V	377	198	1,2616	50	2,71257	$\phi =$	2,71257	x ΔT	1,2616
TUB3-020/18V	400	210	1,2616	50	2,87214	$\phi =$	2,87214	x ΔT	1,2616
TUB3-020/19V	422	221	1,2616	50	3,03170	$\phi =$	3,03170	x ΔT	1,2616
TUB3-020/20V	444	233	1,2616	50	3,19126	$\phi =$	3,19126	x ΔT	1,2616
TUB3-020/21V	466	245	1,2616	50	3,35082	$\phi =$	3,35082	x ΔT	1,2616
TUB3-020/22V	488	256	1,2616	50	3,51039	$\phi =$	3,51039	x ΔT	1,2616
TUB3-020/23V	511	268	1,2616	50	3,66995	$\phi =$	3,66995	x ΔT	1,2616
TUB3-020/24V	533	280	1,2616	50	3,82951	$\phi =$	3,82951	x ΔT	1,2616
TUB3-020/25V	555	291	1,2616	50	3,98908	$\phi =$	3,98908	x ΔT	1,2616
TUB3-020/26V	577	303	1,2616	50	4,14864	$\phi =$	4,14864	x ΔT	1,2616
TUB3-020/27V	599	315	1,2616	50	4,30820	$\phi =$	4,30820	x ΔT	1,2616
TUB3-020/28V	622	326	1,2616	50	4,46777	$\phi =$	4,46777	x ΔT	1,2616
TUB3-020/29V	644	338	1,2616	50	4,62733	$\phi =$	4,62733	x ΔT	1,2616
TUB3-020/30V	666	350	1,2616	50	4,78689	$\phi =$	4,78689	x ΔT	1,2616
TUB3-020/31V	688	361	1,2616	50	4,94646	$\phi =$	4,94646	x ΔT	1,2616
TUB3-020/32V	710	373	1,2616	50	5,10602	$\phi =$	5,10602	x ΔT	1,2616
TUB3-020/33V	733	385	1,2616	50	5,26558	$\phi =$	5,26558	x ΔT	1,2616
TUB3-020/34V	755	396	1,2616	50	5,42514	$\phi =$	5,42514	x ΔT	1,2616
TUB3-020/35V	777	408	1,2616	50	5,58471	$\phi =$	5,58471	x ΔT	1,2616
TUB3-020/36V	799	420	1,2616	50	5,74427	$\phi =$	5,74427	x ΔT	1,2616
TUB3-020/37V	821	431	1,2616	50	5,90383	$\phi =$	5,90383	x ΔT	1,2616
TUB3-020/38V	844	443	1,2616	50	6,06340	$\phi =$	6,06340	x ΔT	1,2616
TUB3-020/39V	866	454	1,2616	50	6,22296	$\phi =$	6,22296	x ΔT	1,2616
TUB3-020/40V	888	466	1,2616	50	6,38252	$\phi =$	6,38252	x ΔT	1,2616
TUB3-020/41V	910	478	1,2616	50	6,54209	$\phi =$	6,54209	x ΔT	1,2616
TUB3-020/42V	932	489	1,2616	50	6,70165	$\phi =$	6,70165	x ΔT	1,2616
TUB3-020/43V	955	501	1,2616	50	6,86121	$\phi =$	6,86121	x ΔT	1,2616
TUB3-020/44V	977	513	1,2616	50	7,02078	$\phi =$	7,02078	x ΔT	1,2616
TUB3-020/45V	999	524	1,2616	50	7,18034	$\phi =$	7,18034	x ΔT	1,2616
TUB3-030/02V	65	34	1,2667	50	0,45796	$\phi =$	0,45796	x ΔT	1,2667
TUB3-030/03V	98	51	1,2667	50	0,68694	$\phi =$	0,68694	x ΔT	1,2667
TUB3-030/04V	130	68	1,2667	50	0,91592	$\phi =$	0,91592	x ΔT	1,2667
TUB3-030/05V	163	85	1,2667	50	1,14490	$\phi =$	1,14490	x ΔT	1,2667
TUB3-030/06V	195	102	1,2667	50	1,37388	$\phi =$	1,37388	x ΔT	1,2667
TUB3-030/07V	228	119	1,2667	50	1,60286	$\phi =$	1,60286	x ΔT	1,2667
TUB3-030/08V	260	136	1,2667	50	1,83184	$\phi =$	1,83184	x ΔT	1,2667
TUB3-030/09V	293	153	1,2667	50	2,06082	$\phi =$	2,06082	x ΔT	1,2667
TUB3-030/10V	325	170	1,2667	50	2,28980	$\phi =$	2,28980	x ΔT	1,2667
TUB3-030/11V	358	187	1,2667	50	2,51878	$\phi =$	2,51878	x ΔT	1,2667
TUB3-030/12V	390	204	1,2667	50	2,74776	$\phi =$	2,74776	x ΔT	1,2667
TUB3-030/13V	423	221	1,2667	50	2,97674	$\phi =$	2,97674	x ΔT	1,2667
TUB3-030/14V	455	238	1,2667	50	3,20572	$\phi =$	3,20572	x ΔT	1,2667
TUB3-030/15V	488	255	1,2667	50	3,43470	$\phi =$	3,43470	x ΔT	1,2667
TUB3-030/16V	520	272	1,2667	50	3,66368	$\phi =$	3,66368	x ΔT	1,2667

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TUB3-030/17V	553	289	1,2667	50	3,89266	$\phi =$	3,89266	$\times \Delta T$	1,2667
TUB3-030/18V	585	306	1,2667	50	4,12164	$\phi =$	4,12164	$\times \Delta T$	1,2667
TUB3-030/19V	618	323	1,2667	50	4,35063	$\phi =$	4,35063	$\times \Delta T$	1,2667
TUB3-030/20V	650	340	1,2667	50	4,57961	$\phi =$	4,57961	$\times \Delta T$	1,2667
TUB3-030/21V	683	357	1,2667	50	4,80859	$\phi =$	4,80859	$\times \Delta T$	1,2667
TUB3-030/22V	715	374	1,2667	50	5,03757	$\phi =$	5,03757	$\times \Delta T$	1,2667
TUB3-030/23V	748	391	1,2667	50	5,26655	$\phi =$	5,26655	$\times \Delta T$	1,2667
TUB3-030/24V	780	408	1,2667	50	5,49553	$\phi =$	5,49553	$\times \Delta T$	1,2667
TUB3-030/25V	813	425	1,2667	50	5,72451	$\phi =$	5,72451	$\times \Delta T$	1,2667
TUB3-030/26V	845	442	1,2667	50	5,95349	$\phi =$	5,95349	$\times \Delta T$	1,2667
TUB3-030/27V	878	459	1,2667	50	6,18247	$\phi =$	6,18247	$\times \Delta T$	1,2667
TUB3-030/28V	910	476	1,2667	50	6,41145	$\phi =$	6,41145	$\times \Delta T$	1,2667
TUB3-030/29V	943	493	1,2667	50	6,64043	$\phi =$	6,64043	$\times \Delta T$	1,2667
TUB3-030/30V	975	510	1,2667	50	6,86941	$\phi =$	6,86941	$\times \Delta T$	1,2667
TUB3-030/31V	1008	528	1,2667	50	7,09839	$\phi =$	7,09839	$\times \Delta T$	1,2667
TUB3-030/32V	1040	545	1,2667	50	7,32737	$\phi =$	7,32737	$\times \Delta T$	1,2667
TUB3-030/33V	1073	562	1,2667	50	7,55635	$\phi =$	7,55635	$\times \Delta T$	1,2667
TUB3-030/34V	1105	579	1,2667	50	7,78533	$\phi =$	7,78533	$\times \Delta T$	1,2667
TUB3-030/35V	1138	596	1,2667	50	8,01431	$\phi =$	8,01431	$\times \Delta T$	1,2667
TUB3-030/36V	1170	613	1,2667	50	8,24329	$\phi =$	8,24329	$\times \Delta T$	1,2667
TUB3-030/37V	1203	630	1,2667	50	8,47227	$\phi =$	8,47227	$\times \Delta T$	1,2667
TUB3-030/38V	1235	647	1,2667	50	8,70125	$\phi =$	8,70125	$\times \Delta T$	1,2667
TUB3-030/39V	1268	664	1,2667	50	8,93023	$\phi =$	8,93023	$\times \Delta T$	1,2667
TUB3-030/40V	1300	681	1,2667	50	9,15921	$\phi =$	9,15921	$\times \Delta T$	1,2667
TUB3-030/41V	1333	698	1,2667	50	9,38819	$\phi =$	9,38819	$\times \Delta T$	1,2667
TUB3-030/42V	1365	715	1,2667	50	9,61717	$\phi =$	9,61717	$\times \Delta T$	1,2667
TUB3-030/43V	1398	732	1,2667	50	9,84615	$\phi =$	9,84615	$\times \Delta T$	1,2667
TUB3-030/44V	1430	749	1,2667	50	10,07513	$\phi =$	10,07513	$\times \Delta T$	1,2667
TUB3-030/45V	1463	766	1,2667	50	10,30411	$\phi =$	10,30411	$\times \Delta T$	1,2667
TUB3-040/02V	85	45	1,2698	50	0,59304	$\phi =$	0,59304	$\times \Delta T$	1,2698
TUB3-040/03V	128	67	1,2698	50	0,88957	$\phi =$	0,88957	$\times \Delta T$	1,2698
TUB3-040/04V	170	89	1,2698	50	1,18609	$\phi =$	1,18609	$\times \Delta T$	1,2698
TUB3-040/05V	213	111	1,2698	50	1,48261	$\phi =$	1,48261	$\times \Delta T$	1,2698
TUB3-040/06V	256	134	1,2698	50	1,77913	$\phi =$	1,77913	$\times \Delta T$	1,2698
TUB3-040/07V	298	156	1,2698	50	2,07566	$\phi =$	2,07566	$\times \Delta T$	1,2698
TUB3-040/08V	341	178	1,2698	50	2,37218	$\phi =$	2,37218	$\times \Delta T$	1,2698
TUB3-040/09V	383	200	1,2698	50	2,66870	$\phi =$	2,66870	$\times \Delta T$	1,2698
TUB3-040/10V	426	223	1,2698	50	2,96522	$\phi =$	2,96522	$\times \Delta T$	1,2698
TUB3-040/11V	469	245	1,2698	50	3,26175	$\phi =$	3,26175	$\times \Delta T$	1,2698
TUB3-040/12V	511	267	1,2698	50	3,55827	$\phi =$	3,55827	$\times \Delta T$	1,2698
TUB3-040/13V	554	290	1,2698	50	3,85479	$\phi =$	3,85479	$\times \Delta T$	1,2698
TUB3-040/14V	596	312	1,2698	50	4,15131	$\phi =$	4,15131	$\times \Delta T$	1,2698
TUB3-040/15V	639	334	1,2698	50	4,44784	$\phi =$	4,44784	$\times \Delta T$	1,2698
TUB3-040/16V	682	356	1,2698	50	4,74436	$\phi =$	4,74436	$\times \Delta T$	1,2698
TUB3-040/17V	724	379	1,2698	50	5,04088	$\phi =$	5,04088	$\times \Delta T$	1,2698
TUB3-040/18V	767	401	1,2698	50	5,33740	$\phi =$	5,33740	$\times \Delta T$	1,2698
TUB3-040/19V	809	423	1,2698	50	5,63393	$\phi =$	5,63393	$\times \Delta T$	1,2698
TUB3-040/20V	852	445	1,2698	50	5,93045	$\phi =$	5,93045	$\times \Delta T$	1,2698
TUB3-040/21V	895	468	1,2698	50	6,22697	$\phi =$	6,22697	$\times \Delta T$	1,2698
TUB3-040/22V	937	490	1,2698	50	6,52349	$\phi =$	6,52349	$\times \Delta T$	1,2698
TUB3-040/23V	980	512	1,2698	50	6,82001	$\phi =$	6,82001	$\times \Delta T$	1,2698
TUB3-040/24V	1022	534	1,2698	50	7,11654	$\phi =$	7,11654	$\times \Delta T$	1,2698
TUB3-040/25V	1065	557	1,2698	50	7,41306	$\phi =$	7,41306	$\times \Delta T$	1,2698
TUB3-040/26V	1108	579	1,2698	50	7,70958	$\phi =$	7,70958	$\times \Delta T$	1,2698
TUB3-040/27V	1150	601	1,2698	50	8,00610	$\phi =$	8,00610	$\times \Delta T$	1,2698
TUB3-040/28V	1193	624	1,2698	50	8,30263	$\phi =$	8,30263	$\times \Delta T$	1,2698
TUB3-040/29V	1235	646	1,2698	50	8,59915	$\phi =$	8,59915	$\times \Delta T$	1,2698
TUB3-040/30V	1278	668	1,2698	50	8,89567	$\phi =$	8,89567	$\times \Delta T$	1,2698
TUB3-040/31V	1321	690	1,2698	50	9,19219	$\phi =$	9,19219	$\times \Delta T$	1,2698
TUB3-040/32V	1363	713	1,2698	50	9,48872	$\phi =$	9,48872	$\times \Delta T$	1,2698
TUB3-040/33V	1406	735	1,2698	50	9,78524	$\phi =$	9,78524	$\times \Delta T$	1,2698
TUB3-040/34V	1448	757	1,2698	50	10,08176	$\phi =$	10,08176	$\times \Delta T$	1,2698
TUB3-040/35V	1491	779	1,2698	50	10,37828	$\phi =$	10,37828	$\times \Delta T$	1,2698
TUB3-040/36V	1534	802	1,2698	50	10,67481	$\phi =$	10,67481	$\times \Delta T$	1,2698
TUB3-040/37V	1576	824	1,2698	50	10,97133	$\phi =$	10,97133	$\times \Delta T$	1,2698

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TUB3-040/38V	1619	846	1,2698	50	11,26785	$\phi =$	11,26785	$\times \Delta T$	1,2698
TUB3-040/39V	1661	869	1,2698	50	11,56437	$\phi =$	11,56437	$\times \Delta T$	1,2698
TUB3-040/40V	1704	891	1,2698	50	11,86090	$\phi =$	11,86090	$\times \Delta T$	1,2698
TUB3-040/41V	1747	913	1,2698	50	12,15742	$\phi =$	12,15742	$\times \Delta T$	1,2698
TUB3-040/42V	1789	935	1,2698	50	12,45394	$\phi =$	12,45394	$\times \Delta T$	1,2698
TUB3-040/43V	1832	958	1,2698	50	12,75046	$\phi =$	12,75046	$\times \Delta T$	1,2698
TUB3-040/44V	1874	980	1,2698	50	13,04699	$\phi =$	13,04699	$\times \Delta T$	1,2698
TUB3-040/45V	1917	1002	1,2698	50	13,34351	$\phi =$	13,34351	$\times \Delta T$	1,2698
TUB3-050/02V	105	55	1,2722	50	0,72679	$\phi =$	0,72679	$\times \Delta T$	1,2722
TUB3-050/03V	158	83	1,2722	50	1,09019	$\phi =$	1,09019	$\times \Delta T$	1,2722
TUB3-050/04V	211	110	1,2722	50	1,45359	$\phi =$	1,45359	$\times \Delta T$	1,2722
TUB3-050/05V	264	138	1,2722	50	1,81698	$\phi =$	1,81698	$\times \Delta T$	1,2722
TUB3-050/06V	316	165	1,2722	50	2,18038	$\phi =$	2,18038	$\times \Delta T$	1,2722
TUB3-050/07V	369	193	1,2722	50	2,54378	$\phi =$	2,54378	$\times \Delta T$	1,2722
TUB3-050/08V	422	220	1,2722	50	2,90717	$\phi =$	2,90717	$\times \Delta T$	1,2722
TUB3-050/09V	474	248	1,2722	50	3,27057	$\phi =$	3,27057	$\times \Delta T$	1,2722
TUB3-050/10V	527	275	1,2722	50	3,63397	$\phi =$	3,63397	$\times \Delta T$	1,2722
TUB3-050/11V	580	303	1,2722	50	3,99736	$\phi =$	3,99736	$\times \Delta T$	1,2722
TUB3-050/12V	632	330	1,2722	50	4,36076	$\phi =$	4,36076	$\times \Delta T$	1,2722
TUB3-050/13V	685	358	1,2722	50	4,72416	$\phi =$	4,72416	$\times \Delta T$	1,2722
TUB3-050/14V	738	385	1,2722	50	5,08755	$\phi =$	5,08755	$\times \Delta T$	1,2722
TUB3-050/15V	791	413	1,2722	50	5,45095	$\phi =$	5,45095	$\times \Delta T$	1,2722
TUB3-050/16V	843	440	1,2722	50	5,81435	$\phi =$	5,81435	$\times \Delta T$	1,2722
TUB3-050/17V	896	468	1,2722	50	6,17774	$\phi =$	6,17774	$\times \Delta T$	1,2722
TUB3-050/18V	949	495	1,2722	50	6,54114	$\phi =$	6,54114	$\times \Delta T$	1,2722
TUB3-050/19V	1001	523	1,2722	50	6,90454	$\phi =$	6,90454	$\times \Delta T$	1,2722
TUB3-050/20V	1054	550	1,2722	50	7,26793	$\phi =$	7,26793	$\times \Delta T$	1,2722
TUB3-050/21V	1107	578	1,2722	50	7,63133	$\phi =$	7,63133	$\times \Delta T$	1,2722
TUB3-050/22V	1159	605	1,2722	50	7,99473	$\phi =$	7,99473	$\times \Delta T$	1,2722
TUB3-050/23V	1212	633	1,2722	50	8,35812	$\phi =$	8,35812	$\times \Delta T$	1,2722
TUB3-050/24V	1265	660	1,2722	50	8,72152	$\phi =$	8,72152	$\times \Delta T$	1,2722
TUB3-050/25V	1318	688	1,2722	50	9,08492	$\phi =$	9,08492	$\times \Delta T$	1,2722
TUB3-050/26V	1370	715	1,2722	50	9,44831	$\phi =$	9,44831	$\times \Delta T$	1,2722
TUB3-050/27V	1423	743	1,2722	50	9,81171	$\phi =$	9,81171	$\times \Delta T$	1,2722
TUB3-050/28V	1476	770	1,2722	50	10,17511	$\phi =$	10,17511	$\times \Delta T$	1,2722
TUB3-050/29V	1528	798	1,2722	50	10,53850	$\phi =$	10,53850	$\times \Delta T$	1,2722
TUB3-050/30V	1581	825	1,2722	50	10,90190	$\phi =$	10,90190	$\times \Delta T$	1,2722
TUB3-050/31V	1634	853	1,2722	50	11,26530	$\phi =$	11,26530	$\times \Delta T$	1,2722
TUB3-050/32V	1686	880	1,2722	50	11,62869	$\phi =$	11,62869	$\times \Delta T$	1,2722
TUB3-050/33V	1739	908	1,2722	50	11,99209	$\phi =$	11,99209	$\times \Delta T$	1,2722
TUB3-050/34V	1792	936	1,2722	50	12,35549	$\phi =$	12,35549	$\times \Delta T$	1,2722
TUB3-050/35V	1845	963	1,2722	50	12,71888	$\phi =$	12,71888	$\times \Delta T$	1,2722
TUB3-050/36V	1897	991	1,2722	50	13,08228	$\phi =$	13,08228	$\times \Delta T$	1,2722
TUB3-050/37V	1950	1018	1,2722	50	13,44568	$\phi =$	13,44568	$\times \Delta T$	1,2722
TUB3-050/38V	2003	1046	1,2722	50	13,80907	$\phi =$	13,80907	$\times \Delta T$	1,2722
TUB3-050/39V	2055	1073	1,2722	50	14,17247	$\phi =$	14,17247	$\times \Delta T$	1,2722
TUB3-050/40V	2108	1101	1,2722	50	14,53587	$\phi =$	14,53587	$\times \Delta T$	1,2722
TUB3-050/41V	2161	1128	1,2722	50	14,89926	$\phi =$	14,89926	$\times \Delta T$	1,2722
TUB3-050/42V	2213	1156	1,2722	50	15,26266	$\phi =$	15,26266	$\times \Delta T$	1,2722
TUB3-050/43V	2266	1183	1,2722	50	15,62606	$\phi =$	15,62606	$\times \Delta T$	1,2722
TUB3-050/44V	2319	1211	1,2722	50	15,98945	$\phi =$	15,98945	$\times \Delta T$	1,2722
TUB3-050/45V	2372	1238	1,2722	50	16,35285	$\phi =$	16,35285	$\times \Delta T$	1,2722
TUB3-070/02V	145	76	1,2762	50	0,98569	$\phi =$	0,98569	$\times \Delta T$	1,2762
TUB3-070/03V	218	113	1,2762	50	1,47854	$\phi =$	1,47854	$\times \Delta T$	1,2762
TUB3-070/04V	290	151	1,2762	50	1,97138	$\phi =$	1,97138	$\times \Delta T$	1,2762
TUB3-070/05V	363	189	1,2762	50	2,46423	$\phi =$	2,46423	$\times \Delta T$	1,2762
TUB3-070/06V	436	227	1,2762	50	2,95708	$\phi =$	2,95708	$\times \Delta T$	1,2762
TUB3-070/07V	508	265	1,2762	50	3,44992	$\phi =$	3,44992	$\times \Delta T$	1,2762
TUB3-070/08V	581	303	1,2762	50	3,94277	$\phi =$	3,94277	$\times \Delta T$	1,2762
TUB3-070/09V	653	340	1,2762	50	4,43561	$\phi =$	4,43561	$\times \Delta T$	1,2762
TUB3-070/10V	726	378	1,2762	50	4,92846	$\phi =$	4,92846	$\times \Delta T$	1,2762
TUB3-070/11V	799	416	1,2762	50	5,42130	$\phi =$	5,42130	$\times \Delta T$	1,2762
TUB3-070/12V	871	454	1,2762	50	5,91415	$\phi =$	5,91415	$\times \Delta T$	1,2762
TUB3-070/13V	944	492	1,2762	50	6,40700	$\phi =$	6,40700	$\times \Delta T$	1,2762
TUB3-070/14V	1016	530	1,2762	50	6,89984	$\phi =$	6,89984	$\times \Delta T$	1,2762

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TUB3-070/15V	1089	567	1,2762	50	7,39269	$\phi =$	7,39269	x ΔT	1,2762
TUB3-070/16V	1162	605	1,2762	50	7,88553	$\phi =$	7,88553	x ΔT	1,2762
TUB3-070/17V	1234	643	1,2762	50	8,37838	$\phi =$	8,37838	x ΔT	1,2762
TUB3-070/18V	1307	681	1,2762	50	8,87123	$\phi =$	8,87123	x ΔT	1,2762
TUB3-070/19V	1379	719	1,2762	50	9,36407	$\phi =$	9,36407	x ΔT	1,2762
TUB3-070/20V	1452	757	1,2762	50	9,85692	$\phi =$	9,85692	x ΔT	1,2762
TUB3-070/21V	1525	794	1,2762	50	10,34976	$\phi =$	10,34976	x ΔT	1,2762
TUB3-070/22V	1597	832	1,2762	50	10,84261	$\phi =$	10,84261	x ΔT	1,2762
TUB3-070/23V	1670	870	1,2762	50	11,33545	$\phi =$	11,33545	x ΔT	1,2762
TUB3-070/24V	1742	908	1,2762	50	11,82830	$\phi =$	11,82830	x ΔT	1,2762
TUB3-070/25V	1815	946	1,2762	50	12,32115	$\phi =$	12,32115	x ΔT	1,2762
TUB3-070/26V	1888	984	1,2762	50	12,81399	$\phi =$	12,81399	x ΔT	1,2762
TUB3-070/27V	1960	1021	1,2762	50	13,30684	$\phi =$	13,30684	x ΔT	1,2762
TUB3-070/28V	2033	1059	1,2762	50	13,79968	$\phi =$	13,79968	x ΔT	1,2762
TUB3-070/29V	2105	1097	1,2762	50	14,29253	$\phi =$	14,29253	x ΔT	1,2762
TUB3-070/30V	2178	1135	1,2762	50	14,78538	$\phi =$	14,78538	x ΔT	1,2762
TUB3-070/31V	2251	1173	1,2762	50	15,27822	$\phi =$	15,27822	x ΔT	1,2762
TUB3-070/32V	2323	1210	1,2762	50	15,77107	$\phi =$	15,77107	x ΔT	1,2762
TUB3-070/33V	2396	1248	1,2762	50	16,26391	$\phi =$	16,26391	x ΔT	1,2762
TUB3-070/34V	2468	1286	1,2762	50	16,75676	$\phi =$	16,75676	x ΔT	1,2762
TUB3-070/35V	2541	1324	1,2762	50	17,24960	$\phi =$	17,24960	x ΔT	1,2762
TUB3-070/36V	2614	1362	1,2762	50	17,74245	$\phi =$	17,74245	x ΔT	1,2762
TUB3-070/37V	2686	1400	1,2762	50	18,23530	$\phi =$	18,23530	x ΔT	1,2762
TUB3-070/38V	2759	1437	1,2762	50	18,72814	$\phi =$	18,72814	x ΔT	1,2762
TUB3-070/39V	2831	1475	1,2762	50	19,22099	$\phi =$	19,22099	x ΔT	1,2762
TUB3-070/40V	2904	1513	1,2762	50	19,71383	$\phi =$	19,71383	x ΔT	1,2762
TUB3-070/41V	2977	1551	1,2762	50	20,20668	$\phi =$	20,20668	x ΔT	1,2762
TUB3-070/42V	3049	1589	1,2762	50	20,69953	$\phi =$	20,69953	x ΔT	1,2762
TUB3-080/02V	165	86	1,2779	50	1,11403	$\phi =$	1,11403	x ΔT	1,2779
TUB3-080/03V	248	129	1,2779	50	1,67104	$\phi =$	1,67104	x ΔT	1,2779
TUB3-080/04V	330	172	1,2779	50	2,22806	$\phi =$	2,22806	x ΔT	1,2779
TUB3-080/05V	413	215	1,2779	50	2,78507	$\phi =$	2,78507	x ΔT	1,2779
TUB3-080/06V	496	258	1,2779	50	3,34209	$\phi =$	3,34209	x ΔT	1,2779
TUB3-080/07V	578	301	1,2779	50	3,89910	$\phi =$	3,89910	x ΔT	1,2779
TUB3-080/08V	661	344	1,2779	50	4,45611	$\phi =$	4,45611	x ΔT	1,2779
TUB3-080/09V	743	387	1,2779	50	5,01313	$\phi =$	5,01313	x ΔT	1,2779
TUB3-080/10V	826	430	1,2779	50	5,57014	$\phi =$	5,57014	x ΔT	1,2779
TUB3-080/11V	909	473	1,2779	50	6,12716	$\phi =$	6,12716	x ΔT	1,2779
TUB3-080/12V	991	516	1,2779	50	6,68417	$\phi =$	6,68417	x ΔT	1,2779
TUB3-080/13V	1074	559	1,2779	50	7,24118	$\phi =$	7,24118	x ΔT	1,2779
TUB3-080/14V	1156	602	1,2779	50	7,79820	$\phi =$	7,79820	x ΔT	1,2779
TUB3-080/15V	1239	645	1,2779	50	8,35521	$\phi =$	8,35521	x ΔT	1,2779
TUB3-080/16V	1322	688	1,2779	50	8,91223	$\phi =$	8,91223	x ΔT	1,2779
TUB3-080/17V	1404	731	1,2779	50	9,46924	$\phi =$	9,46924	x ΔT	1,2779
TUB3-080/18V	1487	774	1,2779	50	10,02626	$\phi =$	10,02626	x ΔT	1,2779
TUB3-080/19V	1569	817	1,2779	50	10,58327	$\phi =$	10,58327	x ΔT	1,2779
TUB3-080/20V	1652	860	1,2779	50	11,14028	$\phi =$	11,14028	x ΔT	1,2779
TUB3-080/21V	1735	903	1,2779	50	11,69730	$\phi =$	11,69730	x ΔT	1,2779
TUB3-080/22V	1817	946	1,2779	50	12,25431	$\phi =$	12,25431	x ΔT	1,2779
TUB3-080/23V	1900	989	1,2779	50	12,81133	$\phi =$	12,81133	x ΔT	1,2779
TUB3-080/24V	1982	1032	1,2779	50	13,36834	$\phi =$	13,36834	x ΔT	1,2779
TUB3-080/25V	2065	1075	1,2779	50	13,92536	$\phi =$	13,92536	x ΔT	1,2779
TUB3-080/26V	2148	1118	1,2779	50	14,48237	$\phi =$	14,48237	x ΔT	1,2779
TUB3-080/27V	2230	1161	1,2779	50	15,03938	$\phi =$	15,03938	x ΔT	1,2779
TUB3-080/28V	2313	1204	1,2779	50	15,59640	$\phi =$	15,59640	x ΔT	1,2779
TUB3-080/29V	2395	1247	1,2779	50	16,15341	$\phi =$	16,15341	x ΔT	1,2779
TUB3-080/30V	2478	1290	1,2779	50	16,71043	$\phi =$	16,71043	x ΔT	1,2779
TUB3-080/31V	2561	1333	1,2779	50	17,26744	$\phi =$	17,26744	x ΔT	1,2779
TUB3-080/32V	2643	1376	1,2779	50	17,82445	$\phi =$	17,82445	x ΔT	1,2779
TUB3-080/33V	2726	1419	1,2779	50	18,38147	$\phi =$	18,38147	x ΔT	1,2779
TUB3-080/34V	2808	1462	1,2779	50	18,93848	$\phi =$	18,93848	x ΔT	1,2779
TUB3-080/35V	2891	1505	1,2779	50	19,49550	$\phi =$	19,49550	x ΔT	1,2779
TUB3-080/36V	2974	1548	1,2779	50	20,05251	$\phi =$	20,05251	x ΔT	1,2779
TUB3-080/37V	3056	1591	1,2779	50	20,60953	$\phi =$	20,60953	x ΔT	1,2779
TUB3-090/02V	185	96	1,2795	50	1,23977	$\phi =$	1,23977	x ΔT	1,2795

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TUB3-090/03V	278	144	1,2795	50	1,85965	$\phi =$	1,85965	x ΔT	1,2795
TUB3-090/04V	370	192	1,2795	50	2,47953	$\phi =$	2,47953	x ΔT	1,2795
TUB3-090/05V	463	241	1,2795	50	3,09941	$\phi =$	3,09941	x ΔT	1,2795
TUB3-090/06V	555	289	1,2795	50	3,71930	$\phi =$	3,71930	x ΔT	1,2795
TUB3-090/07V	648	337	1,2795	50	4,33918	$\phi =$	4,33918	x ΔT	1,2795
TUB3-090/08V	740	385	1,2795	50	4,95906	$\phi =$	4,95906	x ΔT	1,2795
TUB3-090/09V	833	433	1,2795	50	5,57895	$\phi =$	5,57895	x ΔT	1,2795
TUB3-090/10V	925	481	1,2795	50	6,19883	$\phi =$	6,19883	x ΔT	1,2795
TUB3-090/11V	1018	529	1,2795	50	6,81871	$\phi =$	6,81871	x ΔT	1,2795
TUB3-090/12V	1110	577	1,2795	50	7,43859	$\phi =$	7,43859	x ΔT	1,2795
TUB3-090/13V	1203	626	1,2795	50	8,05848	$\phi =$	8,05848	x ΔT	1,2795
TUB3-090/14V	1295	674	1,2795	50	8,67836	$\phi =$	8,67836	x ΔT	1,2795
TUB3-090/15V	1388	722	1,2795	50	9,29824	$\phi =$	9,29824	x ΔT	1,2795
TUB3-090/16V	1480	770	1,2795	50	9,91813	$\phi =$	9,91813	x ΔT	1,2795
TUB3-090/17V	1573	818	1,2795	50	10,53801	$\phi =$	10,53801	x ΔT	1,2795
TUB3-090/18V	1665	866	1,2795	50	11,15789	$\phi =$	11,15789	x ΔT	1,2795
TUB3-090/19V	1758	914	1,2795	50	11,77777	$\phi =$	11,77777	x ΔT	1,2795
TUB3-090/20V	1850	962	1,2795	50	12,39766	$\phi =$	12,39766	x ΔT	1,2795
TUB3-090/21V	1943	1010	1,2795	50	13,01754	$\phi =$	13,01754	x ΔT	1,2795
TUB3-090/22V	2035	1059	1,2795	50	13,63742	$\phi =$	13,63742	x ΔT	1,2795
TUB3-090/23V	2128	1107	1,2795	50	14,25731	$\phi =$	14,25731	x ΔT	1,2795
TUB3-090/24V	2220	1155	1,2795	50	14,87719	$\phi =$	14,87719	x ΔT	1,2795
TUB3-090/25V	2313	1203	1,2795	50	15,49707	$\phi =$	15,49707	x ΔT	1,2795
TUB3-090/26V	2405	1251	1,2795	50	16,11695	$\phi =$	16,11695	x ΔT	1,2795
TUB3-090/27V	2498	1299	1,2795	50	16,73684	$\phi =$	16,73684	x ΔT	1,2795
TUB3-090/28V	2590	1347	1,2795	50	17,35672	$\phi =$	17,35672	x ΔT	1,2795
TUB3-090/29V	2683	1395	1,2795	50	17,97660	$\phi =$	17,97660	x ΔT	1,2795
TUB3-090/30V	2775	1443	1,2795	50	18,59649	$\phi =$	18,59649	x ΔT	1,2795
TUB3-090/31V	2868	1492	1,2795	50	19,21637	$\phi =$	19,21637	x ΔT	1,2795
TUB3-090/32V	2960	1540	1,2795	50	19,83625	$\phi =$	19,83625	x ΔT	1,2795
TUB3-090/33V	3053	1588	1,2795	50	20,45613	$\phi =$	20,45613	x ΔT	1,2795
TUB3-090/34V	3145	1636	1,2795	50	21,07602	$\phi =$	21,07602	x ΔT	1,2795
TUB3-100/02V	205	107	1,2811	50	1,36522	$\phi =$	1,36522	x ΔT	1,2811
TUB3-100/03V	308	160	1,2811	50	2,04783	$\phi =$	2,04783	x ΔT	1,2811
TUB3-100/04V	410	213	1,2811	50	2,73044	$\phi =$	2,73044	x ΔT	1,2811
TUB3-100/05V	513	266	1,2811	50	3,41306	$\phi =$	3,41306	x ΔT	1,2811
TUB3-100/06V	615	320	1,2811	50	4,09567	$\phi =$	4,09567	x ΔT	1,2811
TUB3-100/07V	718	373	1,2811	50	4,77828	$\phi =$	4,77828	x ΔT	1,2811
TUB3-100/08V	820	426	1,2811	50	5,46089	$\phi =$	5,46089	x ΔT	1,2811
TUB3-100/09V	923	479	1,2811	50	6,14350	$\phi =$	6,14350	x ΔT	1,2811
TUB3-100/10V	1025	533	1,2811	50	6,82611	$\phi =$	6,82611	x ΔT	1,2811
TUB3-100/11V	1128	586	1,2811	50	7,50872	$\phi =$	7,50872	x ΔT	1,2811
TUB3-100/12V	1230	639	1,2811	50	8,19133	$\phi =$	8,19133	x ΔT	1,2811
TUB3-100/13V	1333	693	1,2811	50	8,87395	$\phi =$	8,87395	x ΔT	1,2811
TUB3-100/14V	1435	746	1,2811	50	9,55656	$\phi =$	9,55656	x ΔT	1,2811
TUB3-100/15V	1538	799	1,2811	50	10,23917	$\phi =$	10,23917	x ΔT	1,2811
TUB3-100/16V	1640	852	1,2811	50	10,92178	$\phi =$	10,92178	x ΔT	1,2811
TUB3-100/17V	1743	906	1,2811	50	11,60439	$\phi =$	11,60439	x ΔT	1,2811
TUB3-100/18V	1845	959	1,2811	50	12,28700	$\phi =$	12,28700	x ΔT	1,2811
TUB3-100/19V	1948	1012	1,2811	50	12,96961	$\phi =$	12,96961	x ΔT	1,2811
TUB3-100/20V	2050	1065	1,2811	50	13,65222	$\phi =$	13,65222	x ΔT	1,2811
TUB3-100/21V	2153	1119	1,2811	50	14,33483	$\phi =$	14,33483	x ΔT	1,2811
TUB3-100/22V	2255	1172	1,2811	50	15,01745	$\phi =$	15,01745	x ΔT	1,2811
TUB3-100/23V	2358	1225	1,2811	50	15,70006	$\phi =$	15,70006	x ΔT	1,2811
TUB3-100/24V	2460	1279	1,2811	50	16,38267	$\phi =$	16,38267	x ΔT	1,2811
TUB3-100/25V	2563	1332	1,2811	50	17,06528	$\phi =$	17,06528	x ΔT	1,2811
TUB3-100/26V	2665	1385	1,2811	50	17,74789	$\phi =$	17,74789	x ΔT	1,2811
TUB3-100/27V	2768	1438	1,2811	50	18,43050	$\phi =$	18,43050	x ΔT	1,2811
TUB3-100/28V	2870	1492	1,2811	50	19,11311	$\phi =$	19,11311	x ΔT	1,2811
TUB3-100/29V	2973	1545	1,2811	50	19,79572	$\phi =$	19,79572	x ΔT	1,2811
TUB3-100/30V	3075	1598	1,2811	50	20,47834	$\phi =$	20,47834	x ΔT	1,2811
TUB3-100/31V	3178	1651	1,2811	50	21,16095	$\phi =$	21,16095	x ΔT	1,2811
TUB3-120/02V	245	127	1,2828	50	1,61947	$\phi =$	1,61947	x ΔT	1,2828
TUB3-120/03V	367	191	1,2828	50	2,42920	$\phi =$	2,42920	x ΔT	1,2828
TUB3-120/04V	490	254	1,2828	50	3,23894	$\phi =$	3,23894	x ΔT	1,2828

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TUB3-120/05V	612	318	1,2828	50	4,04867	$\phi =$	4,04867	$\times \Delta T$	1,2828
TUB3-120/06V	734	381	1,2828	50	4,85841	$\phi =$	4,85841	$\times \Delta T$	1,2828
TUB3-120/07V	857	445	1,2828	50	5,66814	$\phi =$	5,66814	$\times \Delta T$	1,2828
TUB3-120/08V	979	508	1,2828	50	6,47788	$\phi =$	6,47788	$\times \Delta T$	1,2828
TUB3-120/09V	1102	572	1,2828	50	7,28761	$\phi =$	7,28761	$\times \Delta T$	1,2828
TUB3-120/10V	1224	636	1,2828	50	8,09735	$\phi =$	8,09735	$\times \Delta T$	1,2828
TUB3-120/11V	1346	699	1,2828	50	8,90708	$\phi =$	8,90708	$\times \Delta T$	1,2828
TUB3-120/12V	1469	763	1,2828	50	9,71682	$\phi =$	9,71682	$\times \Delta T$	1,2828
TUB3-120/13V	1591	826	1,2828	50	10,52655	$\phi =$	10,52655	$\times \Delta T$	1,2828
TUB3-120/14V	1714	890	1,2828	50	11,33628	$\phi =$	11,33628	$\times \Delta T$	1,2828
TUB3-120/15V	1836	953	1,2828	50	12,14602	$\phi =$	12,14602	$\times \Delta T$	1,2828
TUB3-120/16V	1958	1017	1,2828	50	12,95575	$\phi =$	12,95575	$\times \Delta T$	1,2828
TUB3-120/17V	2081	1081	1,2828	50	13,76549	$\phi =$	13,76549	$\times \Delta T$	1,2828
TUB3-120/18V	2203	1144	1,2828	50	14,57522	$\phi =$	14,57522	$\times \Delta T$	1,2828
TUB3-120/19V	2326	1208	1,2828	50	15,38496	$\phi =$	15,38496	$\times \Delta T$	1,2828
TUB3-120/20V	2448	1271	1,2828	50	16,19469	$\phi =$	16,19469	$\times \Delta T$	1,2828
TUB3-120/21V	2570	1335	1,2828	50	17,00443	$\phi =$	17,00443	$\times \Delta T$	1,2828
TUB3-120/22V	2693	1398	1,2828	50	17,81416	$\phi =$	17,81416	$\times \Delta T$	1,2828
TUB3-120/23V	2815	1462	1,2828	50	18,62390	$\phi =$	18,62390	$\times \Delta T$	1,2828
TUB3-120/24V	2938	1525	1,2828	50	19,43363	$\phi =$	19,43363	$\times \Delta T$	1,2828
TUB3-120/25V	3060	1589	1,2828	50	20,24336	$\phi =$	20,24336	$\times \Delta T$	1,2828
TUB3-120/26V	3182	1653	1,2828	50	21,05310	$\phi =$	21,05310	$\times \Delta T$	1,2828
TUB3-150/02V	305	158	1,2854	50	1,99730	$\phi =$	1,99730	$\times \Delta T$	1,2854
TUB3-150/03V	457	237	1,2854	50	2,99399	$\phi =$	2,99399	$\times \Delta T$	1,2854
TUB3-150/04V	610	316	1,2854	50	3,99199	$\phi =$	3,99199	$\times \Delta T$	1,2854
TUB3-150/05V	762	395	1,2854	50	4,98998	$\phi =$	4,98998	$\times \Delta T$	1,2854
TUB3-150/06V	914	474	1,2854	50	5,98798	$\phi =$	5,98798	$\times \Delta T$	1,2854
TUB3-150/07V	1067	553	1,2854	50	6,98597	$\phi =$	6,98597	$\times \Delta T$	1,2854
TUB3-150/08V	1219	632	1,2854	50	7,98397	$\phi =$	7,98397	$\times \Delta T$	1,2854
TUB3-150/09V	1372	711	1,2854	50	8,98197	$\phi =$	8,98197	$\times \Delta T$	1,2854
TUB3-150/10V	1524	790	1,2854	50	9,97996	$\phi =$	9,97996	$\times \Delta T$	1,2854
TUB3-150/11V	1676	869	1,2854	50	10,97796	$\phi =$	10,97796	$\times \Delta T$	1,2854
TUB3-150/12V	1829	948	1,2854	50	11,97596	$\phi =$	11,97596	$\times \Delta T$	1,2854
TUB3-150/13V	1981	1027	1,2854	50	12,97395	$\phi =$	12,97395	$\times \Delta T$	1,2854
TUB3-150/14V	2134	1106	1,2854	50	13,97195	$\phi =$	13,97195	$\times \Delta T$	1,2854
TUB3-150/15V	2286	1186	1,2854	50	14,96994	$\phi =$	14,96994	$\times \Delta T$	1,2854
TUB3-150/16V	2438	1265	1,2854	50	15,96794	$\phi =$	15,96794	$\times \Delta T$	1,2854
TUB3-150/17V	2591	1344	1,2854	50	16,96594	$\phi =$	16,96594	$\times \Delta T$	1,2854
TUB3-150/18V	2743	1423	1,2854	50	17,96393	$\phi =$	17,96393	$\times \Delta T$	1,2854
TUB3-150/19V	2896	1502	1,2854	50	18,96193	$\phi =$	18,96193	$\times \Delta T$	1,2854
TUB3-150/20V	3048	1581	1,2854	50	19,95993	$\phi =$	19,95993	$\times \Delta T$	1,2854
TUB3-150/21V	3200	1660	1,2854	50	20,95792	$\phi =$	20,95792	$\times \Delta T$	1,2854
TUB3-150/22V	3353	1739	1,2854	50	21,95592	$\phi =$	21,95592	$\times \Delta T$	1,2854
TUB3-180/02V	365	189	1,2876	50	2,37233	$\phi =$	2,37233	$\times \Delta T$	1,2876
TUB3-180/03V	548	284	1,2876	50	3,55849	$\phi =$	3,55849	$\times \Delta T$	1,2876
TUB3-180/04V	731	379	1,2876	50	4,74466	$\phi =$	4,74466	$\times \Delta T$	1,2876
TUB3-180/05V	914	473	1,2876	50	5,93082	$\phi =$	5,93082	$\times \Delta T$	1,2876
TUB3-180/06V	1096	568	1,2876	50	7,11698	$\phi =$	7,11698	$\times \Delta T$	1,2876
TUB3-180/07V	1279	662	1,2876	50	8,30315	$\phi =$	8,30315	$\times \Delta T$	1,2876
TUB3-180/08V	1462	757	1,2876	50	9,48931	$\phi =$	9,48931	$\times \Delta T$	1,2876
TUB3-180/09V	1644	852	1,2876	50	10,67548	$\phi =$	10,67548	$\times \Delta T$	1,2876
TUB3-180/10V	1827	946	1,2876	50	11,86164	$\phi =$	11,86164	$\times \Delta T$	1,2876
TUB3-180/11V	2010	1041	1,2876	50	13,04780	$\phi =$	13,04780	$\times \Delta T$	1,2876
TUB3-180/12V	2192	1136	1,2876	50	14,23397	$\phi =$	14,23397	$\times \Delta T$	1,2876
TUB3-180/13V	2375	1230	1,2876	50	15,42013	$\phi =$	15,42013	$\times \Delta T$	1,2876
TUB3-180/14V	2558	1325	1,2876	50	16,60630	$\phi =$	16,60630	$\times \Delta T$	1,2876
TUB3-180/15V	2741	1420	1,2876	50	17,79246	$\phi =$	17,79246	$\times \Delta T$	1,2876
TUB3-180/16V	2923	1514	1,2876	50	18,97863	$\phi =$	18,97863	$\times \Delta T$	1,2876
TUB3-180/17V	3106	1609	1,2876	50	20,16479	$\phi =$	20,16479	$\times \Delta T$	1,2876
TUB3-180/18V	3289	1704	1,2876	50	21,35095	$\phi =$	21,35095	$\times \Delta T$	1,2876
TUB3-180/19V	3471	1798	1,2876	50	22,53712	$\phi =$	22,53712	$\times \Delta T$	1,2876
TUB3-180/20V	3654	1893	1,2876	50	23,72328	$\phi =$	23,72328	$\times \Delta T$	1,2876
TUB3-180/21V	3837	1987	1,2876	50	24,90945	$\phi =$	24,90945	$\times \Delta T$	1,2876
TUB3-180/22V	4019	2082	1,2876	50	26,09561	$\phi =$	26,09561	$\times \Delta T$	1,2876
TUB3-180/23V	4202	2177	1,2876	50	27,28177	$\phi =$	27,28177	$\times \Delta T$	1,2876

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TUB3-200/02V	406	210	1,2889	50	2,62255	$\phi =$	2,62255	x ΔT	1,2889
TUB3-200/03V	609	315	1,2889	50	3,93382	$\phi =$	3,93382	x ΔT	1,2889
TUB3-200/04V	812	420	1,2889	50	5,24510	$\phi =$	5,24510	x ΔT	1,2889
TUB3-200/05V	1015	525	1,2889	50	6,55637	$\phi =$	6,55637	x ΔT	1,2889
TUB3-200/06V	1218	631	1,2889	50	7,86765	$\phi =$	7,86765	x ΔT	1,2889
TUB3-200/07V	1421	736	1,2889	50	9,17892	$\phi =$	9,17892	x ΔT	1,2889
TUB3-200/08V	1624	841	1,2889	50	10,49020	$\phi =$	10,49020	x ΔT	1,2889
TUB3-200/09V	1827	946	1,2889	50	11,80147	$\phi =$	11,80147	x ΔT	1,2889
TUB3-200/10V	2030	1051	1,2889	50	13,11274	$\phi =$	13,11274	x ΔT	1,2889
TUB3-200/11V	2233	1156	1,2889	50	14,42402	$\phi =$	14,42402	x ΔT	1,2889
TUB3-200/12V	2436	1261	1,2889	50	15,73529	$\phi =$	15,73529	x ΔT	1,2889
TUB3-200/13V	2639	1366	1,2889	50	17,04657	$\phi =$	17,04657	x ΔT	1,2889
TUB3-200/14V	2842	1471	1,2889	50	18,35784	$\phi =$	18,35784	x ΔT	1,2889
TUB3-200/15V	3045	1576	1,2889	50	19,66912	$\phi =$	19,66912	x ΔT	1,2889
TUB3-200/16V	3248	1681	1,2889	50	20,98039	$\phi =$	20,98039	x ΔT	1,2889
TUB3-200/17V	3451	1787	1,2889	50	22,29167	$\phi =$	22,29167	x ΔT	1,2889
TUB3-200/18V	3654	1892	1,2889	50	23,60294	$\phi =$	23,60294	x ΔT	1,2889
TUB3-200/19V	3857	1997	1,2889	50	24,91421	$\phi =$	24,91421	x ΔT	1,2889
TUB3-200/20V	4060	2102	1,2889	50	26,22549	$\phi =$	26,22549	x ΔT	1,2889
TUB3-200/21V	4263	2207	1,2889	50	27,53676	$\phi =$	27,53676	x ΔT	1,2889

W imieniu producenta podpisać:

(Signed for and on behalf of the manufacturer by:)

Z-ca Prezesa ds. realizacji

Bartosz Ścierzyński

Nowa Wieś 03.03.2023

Bartosz Ścierzyński
Bartu Ścierzyński
 Członek Zarządu

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