

LAUDA Technical data according to DIN 12876 standard



Type	Page	Working temperature range ^① °C	Working temperature range with water cooling °C	Operating temperature range ^② °C	Resolution of setting °C	Resolution of indication ±K	Temperature stability	Safety fittings ^③	Heater power kW	Pump type ^④ bar	Pump pressure max. L/min	Pump flow max. (pressure) mm	Pump connection thread Ø Nipples mm
LAUDA Aqualine													
AL 2	12	25...95	–	–	0.1/1	0.1	0.2 ^⑤	I, NFL	0.5	–	–	–	–
AL 5	12	25...95	–	–	0.1/1	0.1	0.2 ^⑤	I, NFL	0.5	–	–	–	–
AL 12	12	25...95	–	–	0.1/1	0.1	0.2 ^⑤	I, NFL	1.0	–	–	–	–
AL 18	12	25...95	–	–	0.1/1	0.1	0.2 ^⑤	I, NFL	1.2	–	–	–	–
AL 25	12	25...95	–	–	0.1/1	0.1	0.2 ^⑤	I, NFL	1.2	–	–	–	–

LAUDA Alpha														
A	16	25...85	20...85	-25...85	0.1/1	0.1	0.05	I, NFL	1.5	D	0.2	15	– ^⑥	– ^⑥
A 6	17	25...85	20...85	-25...85	0.1/1	0.1	0.05	I, NFL	1.5	D	0.2	15	– ^⑥	– ^⑥
A 12	17	25...85	20...85	-25...85	0.1/1	0.1	0.05	I, NFL	1.5	D	0.2	15	– ^⑥	– ^⑥
A 24	17	25...85	20...85	-25...85	0.1/1	0.1	0.05	I, NFL	1.5	D	0.2	15	– ^⑥	– ^⑥

NEW

LAUDA ECO														
Silver	23	20...150	20...150	-20...150	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
Gold	23	20...200	20...200	-20...200	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦
ET 6 S	27	20...100	20...100	-20...100	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
ET 12 S	27	20...100	20...100	-20...100	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
ET 15 S	27	20...100	20...100	-20...100	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	13
ET 20 S	27	20...100	20...100	-20...100	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
ET 6 G	27	20...100	20...100	-20...100	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦
ET 12 G	27	20...100	20...100	-20...100	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦
ET 15 G	27	20...100	20...100	-20...100	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	M16 x 1	13
ET 20 G	27	20...100	20...100	-20...100	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦
E 4 S	28	20...150	20...150	-20...150	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	13
E 10 S	28	20...150	20...150	-20...150	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
E 15 S	28	20...150	20...150	-20...150	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
E 20 S	28	20...150	20...150	-20...150	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
E 25 S	28	20...150	20...150	-20...150	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
E 40 S	28	20...150	20...150	-20...150	0.01	0.01	0.01	III, FL	1.3	V	0.55	22	– ^⑦	– ^⑦
E 4 G	29	20...200	20...200	-20...200	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	M16 x 1	13
E 10 G	29	20...200	20...200	-20...200	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦
E 15 G	29	20...200	20...200	-20...200	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦
E 20 G	29	20...200	20...200	-20...200	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦
E 25 G	29	20...200	20...200	-20...200	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦
E 40 G	29	20...200	20...200	-20...200	0.01	0.01	0.01	III, FL	2.6	V	0.55	22	– ^⑦	– ^⑦

^① At pump level 1 ^② With external cooling/add-on cooler ^③ III, FL: for use with flammable and non-flammable liquids; I, NFL: for use with non-flammable liquids

^④ Pump connection sets for ECO Silver and ECO Gold available as accessories. See page 31. ^⑤ Pump connection sets for Alpha available as accessoires. See page 19.



Bath volume min.	Bath volume max.	Bath opening (WxD)	Bath depth	Usable depth	Height top of bath	Height gable cover	Dimensions (WxDxH)	Weight	Power supply [®]	Loading	Cat. No.	Type
L	L	mm	mm	mm	mm	mm	mm	kg	V; Hz	kW		
LAUDA Aqualine												
0.9	1.7	300x151	65	–	–	55	343x186x290	4.5	230; 50/60	0.6	LCB 0723	AL 2
1.0	5.0	300x151	150	–	–	55	343x186x290	5.0	230; 50/60	0.6	LCB 0724	AL 5
2.0	11.7	329x300	150	–	–	90	372x335x325	8.5	230; 50/60	1.1	LCB 0725	AL 12
3.0	18.2	505x300	150	–	–	90	548x335x325	11.5	230; 50/60	1.3	LCB 0726	AL 18
3.0	25.2	505x300	200	–	–	90	548x335x375	13.5	230; 50/60	1.3	LCB 0727	AL 25

LAUDA Alpha												
–	50.0	–	Min. 150	Min. 100	–	–	125x150x300	3.5	230; 50/60	1.5	LCEX 0226	A
2.5	5.5	145x161	150	130	212	–	181x332x370	6.2	230; 50/60	1.5	LCBX 0733	A 6
8.0	12	235x161	200	180	262	–	270x332x420	7.5	230; 50/60	1.5	LCBX 0734	A 12
18.0	25	295x374	200	180	262	–	332x535x420	10.5	230; 50/60	1.5	LCBX 0735	A 24

LAUDA ECO												
–	–	–	Min. 150	–	–	–	130x135x325	3.0	230; 50/60	1.4	LCE 0227	Silver
–	–	–	Min. 150	–	–	–	130x135x325	3.4	230; 50/60	2.7	LCE 0228	Gold
5.0	6.0	130x285	160	140	169	–	143x433x349	4.1	230; 50/60	1.4	LCM 0096	ET 6 S
9.5	12.0	300x175	160	140	208	–	322x331x389	6.4	230; 50/60	1.4	LCD 0286	ET 12 S
13.5	15.0	275x130	310	290	356	–	428x148x532	6.4	230; 50/60	1.4	LCD 0288	ET 15 S
15.0	20.0	300x350	160	140	208	–	322x506x389	7.6	230; 50/60	1.4	LCD 0290	ET 20 S
5.0	6.0	130x285	160	140	169	–	143x433x349	4.5	230; 50/60	2.7	LCM 0097	ET 6 G
9.5	12.0	300x175	160	140	208	–	322x331x389	6.8	230; 50/60	2.7	LCD 0287	ET 12 G
13.5	15.0	275x130	310	290	356	–	428x148x532	6.8	230; 50/60	2.7	LCD 0289	ET 15 G
15.0	20.0	300x350	160	140	208	–	322x506x389	8.0	230; 50/60	2.7	LCD 0291	ET 20 G
3.0	3.5	135x105	150	130	196	–	168x272x376	6.6	230; 50/60	1.4	LCB 0736	E 4 S
7.5	11.0	300x190	150	130	196	–	331x361x376	8.6	230; 50/60	1.4	LCB 0738	E 10 S
12.0	16.0	300x190	200	180	246	–	331x361x426	10.3	230; 50/60	1.4	LCB 0740	E 15 S
13.0	19.0	300x365	150	130	196	–	331x537x376	11.8	230; 50/60	1.4	LCB 0742	E 20 S
16.0	25.0	300x365	200	180	246	–	331x537x426	13.1	230; 50/60	1.4	LCB 0744	E 25 S
32.0	40.0	300x613	200	180	248	–	350x803x428	17.2	230; 50/60	1.4	LCB 0746	E 40 S
3.0	3.5	135x105	150	130	196	–	168x272x376	7.0	230; 50/60	2.7	LCB 0737	E 4 G
7.5	11.0	300x190	150	130	196	–	331x361x376	9.0	230; 50/60	2.7	LCB 0739	E 10 G
12.0	16.0	300x190	200	180	246	–	331x361x426	10.7	230; 50/60	2.7	LCB 0741	E 15 G
13.0	19.0	300x365	150	130	196	–	331x537x376	12.2	230; 50/60	2.7	LCB 0743	E 20 G
16.0	25.0	300x365	200	180	246	–	331x537x426	13.5	230; 50/60	2.7	LCB 0745	E 25 G
32.0	40.0	300x613	200	180	248	–	350x803x428	17.6	230; 50/60	2.7	LCB 0747	E 40 G

[®] D: pressure pump; V: Vario pump, pressure pump with 6 selectable pump levels

[®] Other power supply variants on page 100

[®] At 37 °C

LAUDA Technical data according to DIN 12876 standard



Technical data

Type	Page	Working temperature range ^①	Working temperature range with water cooling	Operating temperature range ^②	Resolution of setting	Resolution of indication	Temperature stability	Safety fittings ^③	Heater power	Pump type ^④	Pump pressure max.	Pump suction max.	Pump flow max. (pressure)	Pump flow max. (suction)	Pump connection thread	Ø Nipples
		°C	°C	°C	°C	°C	±K		kW	bar	bar	L/min	L/min	mm	mm	
LAUDA Proline																
P 5	36	35...300	20...300	-30...300	0.1/0.01	0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 8	36	35...300	20...300	-30...300	0.1/0.01	0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 12	36	30...300	20...300	-30...300	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	1.1	-	32	-	M16 x 1	13
P 18	36	30...300	20...300	-30...300	0.1/0.01	0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 26	37	30...300	20...300	-30...300	0.1/0.01	0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 40	37	30...300*	20...300	-30...300*	0.01	0.1/0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 50	37	30...300*	20...300	-30...300*	0.01	0.1/0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 5 C	38	35...300	20...300	-30...300	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 8 C	38	35...300	20...300	-30...300	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 12 C	38	30...300	20...300	-30...300	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	1.1	-	32	-	M16 x 1	13
P 18 C	38	30...300	20...300	-30...300	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 26 C	39	30...300	20...300	-30...300	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 40 C	39	30...300*	20...300	-30...300*	0.01	0.1/0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
P 50 C	39	30...300*	20...300	-30...300*	0.01	0.1/0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
PV 15	40	30...230	20...230	0...230	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PV 24	40	30...230	20...230	0...230	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PV 36	40	30...230	20...230	0...230	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PV 15 C	40	30...230	20...230	0...230	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PV 24 C	40	30...230	20...230	0...230	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PV 36 C	40	30...230	20...230	0...230	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PVL 15	40	30...100	20...100	-60...100	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PVL 24	40	30...100	20...100	-60...100	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PVL 15 C	40	30...100	20...100	-60...100	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PVL 24 C	40	30...100	20...100	-60...100	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PB	41	30...300	20...300	-30...300	0.1/0.01	0.01	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
PB C	41	30...300	20...300	-30...300	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VF	0.7	0.4	25	23	M16 x 1	13
PBD	41	30...300	20...300	-30...300	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	1.1	-	32	-	M16 x 1	13
PBD C	41	30...300	20...300	-30...300	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	1.1	-	32	-	M16 x 1	13

* Max. temperature only with bath cover

LAUDA Ultra High-temperature thermostats																
USH 400	54	80...400	20...400*	0...400	0.01	0.01/0.001	0.02...0.1	III, FL	3.0	D	0.80	-	22	-	M16 x 1	13
USH 400/6	54	80...400	20...400*	0...400	0.01	0.01/0.001	0.02...0.2	III, FL	5.6	D	0.80	-	22	-	M16 x 1	13

* With controlled cooling MVH

LAUDA Calibration thermostats																
RE 212 J	78	-30...200	-	-	0.1/0.01	0.05	0.01	III, FL	2.25	V	0.40	-	17	-	M16 x 1	13
RE 312 J	78	-30...200	-	-	0.1/0.01	0.05/0.01	0.01	III, FL	2.25	V	0.40	-	17	-	M16 x 1	13
PJ 12	78	30...300	20...300	0...300	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PJ 12 C	78	30...300	20...300	0...300	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PJL 12	78	30...200	20...200	-40...200	0.1/0.01	0.01	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
PJL 12 C	78	30...200	20...200	-40...200	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	VFP	0.8	-	25	-	M16 x 1	13
UB 20 J	79	45...300	20...300	-30...300	0.01	0.01/0.001	0.005...0.01	III, FL	3.0	D	0.30	-	15	-	M16 x 1	13
UB 30 J	79	45...300	20...300	-30...300	0.01	0.01/0.001	0.005...0.01	III, FL	3.0	D	0.30	-	15	-	M16 x 1	13
UB 40 J	79	45...300	20...300	-30...300	0.01	0.01/0.001	0.005...0.01	III, FL	3.0	D	0.30	-	15	-	M16 x 1	13
UB 65 J	79	80...300	20...300	-30...300	0.01	0.01/0.001	0.005...0.01	III, FL	3.0	D	0.30	-	15	-	M16 x 1	13
UB 20 JL	79	45...200	20...200	-40...200	0.01	0.01/0.001	0.005...0.01	III, FL	3.0	D	0.30	-	15	-	M16 x 1	13
UB 30 JL	79	45...200	20...200	-40...200	0.01	0.01/0.001	0.005...0.01	III, FL	3.0	D	0.30	-	15	-	M16 x 1	13
UB 40 JL	79	45...200	20...200	-35...200	0.01	0.01/0.001	0.005...0.01	III, FL	3.0	D	0.30	-	15	-	M16 x 1	13
UB 20 F	79	35...200	20...200	0...200	0.01	0.01/0.001	0.005	III, FL	1.2	D	0.20	-	12	-	M16 x 1	13

① At pump level 1 ② With external cooling/add-on cooler ③ III, FL: for use with flammable and non-flammable liquids; I, NFL: for use with non-flammable liquids



Bath volume min.	Bath volume max.	Bath opening (WxD)	Bath depth	Usable depth	Height top of bath	Size of glass panel (WxH)	Dimensions (WxDxH)	Weight	Power supply [®]	Loading	Cat. No.	Type
L	L	mm	mm	mm	mm	mm	mm	kg	V; Hz	kW		
LAUDA Proline												
3.5	5.5	150x50	200	180	254	–	200x260x454	12.0	230; 50/60	3.6	LCB 0708	P 5
5.5	8.0	150x150	200	180	254	–	200x360x454	14.0	230; 50/60	3.6	LCB 0710	P 8
6.5	13.5	150x150	320	300	374	–	220x360x574	16.0	230; 50/60	3.6	LCB 0716	P 12
12.5	19.0	300x200	200	180	254	–	370x410x454	19.0	230; 50/60	3.6	LCB 0712	P 18
18.0	27.0	300x350	200	180	254	–	370x560x454	24.0	230; 50/60	3.6	LCB 0714	P 26
30.0	37.0	250x250	450	430	510	–	320x545x710	24.0	230; 50/60	3.6	LCB 0728	P 40
35.0	53.0	300x750	200	180	260	–	1025x350x454	24.0	230; 50/60	3.6	LCB 0730	P 50
3.5	5.5	150x50	200	180	254	–	200x260x454 [®]	12.0	230; 50/60	3.6	LCB 0709	P 5 C
5.5	8.0	150x150	200	180	254	–	200x360x454 [®]	14.0	230; 50/60	3.6	LCB 0711	P 8 C
6.5	13.5	150x150	320	300	374	–	220x360x574 [®]	16.0	230; 50/60	3.6	LCB 0717	P 12 C
12.5	19.0	300x200	200	180	254	–	370x410x454 [®]	19.0	230; 50/60	3.6	LCB 0713	P 18 C
18.0	27.0	300x350	200	180	254	–	370x560x454 [®]	24.0	230; 50/60	3.6	LCB 0715	P 26 C
30.0	37.0	250x250	450	430	510	–	320x545x710 [®]	24.0	230; 50/60	3.6	LCB 0729	P 40 C
35.0	53.0	300x750	200	180	260	–	1025x350x454 [®]	24.0	230; 50/60	3.6	LCB 0731	P 50 C
11.0	15.0	230x135	320	285	390	149x230	506x282x590	26.0	230; 50/60	3.6	LCD 0276	PV 15
19.0	24.0	405x135	320	285	390	326x230	740x282x590	36.0	230; 50/60	3.6	LCD 0278	PV 24
28.0	36.0	585x135	320	285	390	506x230	1040x282x590	44.0	230; 50/60	3.6	LCD 0280	PV 36
11.0	15.0	230x135	320	285	390	149x230	506x282x590 [®]	26.0	230; 50/60	3.6	LCD 0277	PV 15 C
19.0	24.0	405x135	320	285	390	326x230	740x282x590 [®]	36.0	230; 50/60	3.6	LCD 0279	PV 24 C
28.0	36.0	585x135	320	285	390	506x230	1040x282x590 [®]	44.0	230; 50/60	3.6	LCD 0281	PV 36 C
11.0	15.0	230x135	320	285	390	149x230	506x282x590	28.0	230; 50/60	3.6	LCD 0282	PVL 15
19.0	24.0	405x135	320	285	390	326x230	740x282x590	39.0	230; 50/60	3.6	LCD 0284	PVL 24
11.0	15.0	230x135	320	285	390	149x230	506x282x590 [®]	28.0	230; 50/60	3.6	LCD 0283	PVL 15 C
19.0	24.0	405x135	320	285	390	326x230	740x282x590 [®]	39.0	230; 50/60	3.6	LCD 0285	PVL 24 C
–	80.0	**	Min. 200	–	–	–	– x185x400	8.0	230; 50/60	3.6	LCG 0090	PB
–	80.0	**	Min. 200	–	–	–	– x185x520 [®]	8.0	230; 50/60	3.6	LCG 0091	PB C
–	80.0	**	Min. 320	–	–	–	– x185x400	8.0	230; 50/60	3.6	LCG 0092	PBD
–	80.0	**	Min. 320	–	–	–	– x185x520 [®]	8.0	230; 50/60	3.6	LCG 0093	PBD C

** The telescopic rod can be extended for bath widths 310...550 mm

LAUDA Ultra High-temperature thermostats												
1.9	2.1	–	–	–	–	–	Ø 180x540	21.5	230; 50	3.2	LTH 109	USH 400
1.9	2.1	–	–	–	–	–	Ø 180x540	24.5	400; 3/N/PE; 50	5.8	LTH 211	USH 400/6

LAUDA Calibration thermostats												
9.0	12.0	Ø 150	200	180	441	–	250x400x602	30.0	230; 50	2.3	LCK 1879	RE 212 J
9.0	12.0	Ø 150	200	180	441	–	250x400x602	30.0	230; 50	2.3	LCK 1880	RE 312 J
8.5	13.5	Ø 120	320	300	374	–	220x360x574	17.0	230; 50/60	3.6	LCB 0720	PJ 12
8.5	13.5	Ø 120	320	300	374	–	220x360x574 [®]	17.0	230; 50/60	3.6	LCB 0721	PJ 12 C
8.5	13.5	Ø 120	320	300	374	–	220x360x574 [®]	17.0	230; 50/60	3.6	LCB 0718	PJL 12
8.5	13.5	Ø 120	320	300	374	–	220x360x574 [®]	17.0	230; 50/60	3.6	LCB 0719	PJL 12 C
15.0	18.0	Ø 195	195	175	265	–	300x450x465	27.0	230; 50	3.2	LTB 136	UB 20 J
22.5	30.0	Ø 195	320	300	390	–	300x450x590	33.0	230; 50	3.2	LTB 137	UB 30 J
32.5	40.0	Ø 195	450	430	520	–	300x450x720	39.0	230; 50	3.2	LTB 138	UB 40 J
48.0	54.0	Ø 215	690	650	755	–	320x485x955	60.0	230; 50	3.2	LTB 142	UB 65 J
15.0	18.0	Ø 195	195	175	265	–	300x450x465	27.0	230; 50	3.2	LTB 143	UB 20 JL
22.5	30.0	Ø 195	320	300	390	–	300x450x590	33.0	230; 50	3.2	LTB 144	UB 30 JL
32.5	40.0	Ø 195	450	430	520	–	300x450x720	39.0	230; 50	3.2	LTB 145	UB 40 JL
15.0	18.0	Ø 195	195	175	265	–	300x450x465	27.0	230; 50	1.4	LTB 139	UB 20 F

[®] D: pressure pump; Du: Duplex pump, pressure/suction pump; V: Vario pump, pressure pump with 5 selectable output steps; VF: Varioflex pump, pressure/suction pump with 8 selectable output steps; VFP: Varioflex pump, pressure pump with 8 selectable output steps [®] Other power supply variants on page 100/101 [®] With Command remote control: 56 mm higher



Pump type [®]	Pump pressure max.	Pump suction max.	Pump flow max. (pressure)	Pump flow max. (suction)	Pump connection thread	Ø Nipples	Bath volume min.	Bath volume max.	Bath opening (WxD)	Bath depth	Usable depth	Height top of bath	Dimensions (WxDxH)	Weight	Power supply [®]	Loading	Cat. No.	Type
bar	bar	L/min	L/min	mm	mm	L	L	mm	mm	mm	mm	mm	mm	kg	V; Hz	kW		
LAUDA Alpha																		
-	0.2	-	15	-	-	13	5.0	7.5	165x190	160	140	450	235x500x605	31.0	230; 50	1.8	LCKX 1907	RA 8
-	0.2	-	15	-	-	13	9.5	14.5	300x190	160	140	450	365x500x605	37.0	230; 50	1.8	LCKX 1908	RA 12
-	0.2	-	15	-	-	13	14.0	22.0	350x290	160	140	450	415x605x605	43.0	230; 50	1.8	LCKX 1909	RA 24

LAUDA ECO																		
V	0.55	-	22	-	L [®]	13	3.3	4.0	130x105	160	140	365	180x350x546	19.6	230; 50	1.6	LCK 1910	RE 415 S
V	0.55	-	22	-	L [®]	13	3.3	4.0	130x105	160	140	374	180x396x555	21.6	230; 50	1.6	LCK 1912	RE 420 S
V	0.55	-	22	-	L [®]	13	4.6	5.7	150x130	160	140	400	200x430x581	23.3	230; 50	1.6	LCK 1914	RE 620 S
V	0.55	-	22	-	L [®]	13	4.6	5.7	150x130	160	140	400	200x430x581	27.2	230; 50	1.7	LCK 1916	RE 630 S
V	0.55	-	22	-	L [®]	13	8.0	10.0	200x200	160	140	443	280x440x624	34.6	230; 50	2.0	LCK 1918	RE 1050 S
V	0.55	-	22	-	L [®]	13	9.3	12.0	200x200	200	180	443	250x435x624	30.0	230; 50	1.7	LCK 1920	RE 1225 S
V	0.55	-	22	-	L [®]	13	14.0	20.0	300x350	160	140	443	350x570x624	37.0	230; 50	1.7	LCK 1922	RE 2025 S
V	0.55	-	22	-	M16 x 1	13	3.3	4.0	130x105	160	140	365	180x350x546	20.0	230; 50	2.8	LCK 1911	RE 415 G
V	0.55	-	22	-	M16 x 1	13	3.3	4.0	130x105	160	140	374	180x396x555	22.0	230; 50	2.8	LCK 1913	RE 420 G
V	0.55	-	22	-	M16 x 1	13	4.6	5.7	150x130	160	140	400	200x430x581	23.7	230; 50	2.8	LCK 1915	RE 620 G
V	0.55	-	22	-	M16 x 1	13	4.6	5.7	150x130	160	140	400	200x430x581	27.6	230; 50	2.8	LCK 1917	RE 630 G
V	0.55	-	22	-	M16 x 1	13	8.0	10.0	200x200	160	140	443	280x440x624	35.0	230; 50	3.3	LCK 1919	RE 1050 G
V	0.55	-	22	-	M16 x 1	13	9.3	12.0	200x200	200	180	443	250x435x624	30.4	230; 50	2.9	LCK 1921	RE 1225 G
V	0.55	-	22	-	M16 x 1	13	14.0	20.0	300x350	160	140	443	350x570x624	37.4	230; 50	2.9	LCK 1923	RE 2025 G
V	0.55	-	22	-	L [®]	13	3.3	4.0	130x105	160	140	365	180x350x546	20.5	230; 50	1.6	LCK 1924	RE 415 SW
V	0.55	-	22	-	L [®]	13	3.3	4.0	130x105	160	140	374	180x396x555	22.5	230; 50	1.6	LCK 1926	RE 420 SW
V	0.55	-	22	-	L [®]	13	4.6	5.7	150x130	160	140	400	200x430x581	24.3	230; 50	1.6	LCK 1928	RE 620 SW
V	0.55	-	22	-	L [®]	13	4.6	5.7	150x130	160	140	400	200x430x581	28.2	230; 50	1.7	LCK 1930	RE 630 SW
V	0.55	-	22	-	L [®]	13	8.0	10.0	200x200	160	140	443	280x440x624	35.6	230; 50	2.0	LCK 1932	RE 1050 SW
V	0.55	-	22	-	L [®]	13	9.3	12.0	200x200	200	180	443	250x435x624	31.2	230; 50	1.7	LCK 1934	RE 1225 SW
V	0.55	-	22	-	L [®]	13	14.0	20.0	300x350	160	140	443	350x570x624	38.4	230; 50	1.7	LCK 1936	RE 2025 SW
V	0.55	-	22	-	M16 x 1	13	3.3	4.0	130x105	160	140	365	180x350x546	20.9	230; 50	2.8	LCK 1925	RE 415 GW
V	0.55	-	22	-	M16 x 1	13	3.3	4.0	130x105	160	140	374	180x396x555	22.9	230; 50	2.8	LCK 1927	RE 420 GW
V	0.55	-	22	-	M16 x 1	13	4.6	5.7	150x130	160	140	400	200x430x581	24.7	230; 50	2.8	LCK 1929	RE 620 GW
V	0.55	-	22	-	M16 x 1	13	4.6	5.7	150x130	160	140	400	200x430x581	28.6	230; 50	2.9	LCK 1931	RE 630 GW
V	0.55	-	22	-	M16 x 1	13	8.0	10.0	200x200	160	140	443	280x440x624	36.0	230; 50	3.3	LCK 1933	RE 1050 GW
V	0.55	-	22	-	M16 x 1	13	9.3	12.0	200x200	200	180	443	250x435x624	31.6	230; 50	2.9	LCK 1935	RE 1225 GW
V	0.55	-	22	-	M16 x 1	13	14.0	20.0	300x350	160	140	443	350x570x624	38.5	230; 50	2.9	LCK 1937	RE 2025 GW

LAUDA ECO with natural refrigerants																		
V	0.55	-	22	-	L [®]	13	3.3	4.0	130x105	160	140	374	180x396x555	22.5	230; 50	1.6	LCK 1940	RE 420 SN
V	0.55	-	22	-	L [®]	13	4.6	5.7	150x130	160	140	400	200x430x581	24.3	230; 50	1.6	LCK 1942	RE 620 SN
V	0.55	-	22	-	L [®]	13	4.6	5.7	150x130	160	140	400	200x430x581	28.2	230; 50	1.7	LCK 1944	RE 630 SN
V	0.55	-	22	-	L [®]	13	8.0	10.0	200x200	160	140	443	280x440x624	35.6	230; 50	2.0	LCK 1946	RE 1050 SN
V	0.55	-	22	-	L [®]	13	9.3	12.0	200x200	200	180	443	250x435x624	31.2	230; 50	1.7	LCK 1948	RE 1225 SN
V	0.55	-	22	-	L [®]	13	14.0	20.0	300x350	160	140	443	350x570x624	38.4	230; 50	1.7	LCK 1950	RE 2025 SN
V	0.55	-	22	-	M16 x 1	13	3.3	4.0	130x105	160	140	374	180x396x555	22.9	230; 50	2.8	LCK 1941	RE 420 GN
V	0.55	-	22	-	M16 x 1	13	4.6	5.7	150x130	160	140	400	200x430x581	24.7	230; 50	2.8	LCK 1943	RE 620 GN
V	0.55	-	22	-	M16 x 1	13	4.6	5.7	150x130	160	140	400	200x430x581	28.6	230; 50	2.8	LCK 1945	RE 630 GN
V	0.55	-	22	-	M16 x 1	13	8.0	10.0	200x200	160	140	443	280x440x624	36.0	230; 50	3.3	LCK 1947	RE 1050 GN
V	0.55	-	22	-	M16 x 1	13	9.3	12.0	200x200	200	180	443	250x435x624	31.6	230; 50	2.9	LCK 1949	RE 1225 GN
V	0.55	-	22	-	M16 x 1	13	14.0	20.0	300x350	160	140	443	350x570x624	38.5	230; 50	2.9	LCK 1951	RE 2025 GN

[®] D: pressure pump; V: Vario pump, pressure pump with 6 selectable output steps for ECO and 4 selectable output steps for Proline Kryomats; VF: Varioflex pump, pressure/suction pump with 8 selectable output steps [®] Other power supply variants on page 101 [®] Pump connection sets for ECO Silver and ECO Gold available as accessories. See page 31.

LAUDA Technical data according to DIN 12876 standard



Technical data

Type	Page	Working temperature range (equal to ACC range) ^①		Resolution of setting °C	Resolution of indication °C	Temperature stability ±K	Safety fittings ^②	Heater power kW	Effective cooling output ^① (measured with ethanol, 20 °C ambient temperature)											
		°C	°C						150 °C (thermal oil)	20 °C	0 °C	-20 °C	-30 °C	-40 °C	-45 °C	-50 °C	-55 °C	-60 °C	-70 °C	-80 °C
LAUDA ECO with natural refrigerants																				
RE 420 SWN	26	-20...150	0.01	0.01	0.02	III, FL	1.3	0.20	0.15	0.03	-	-	-	-	-	-	-	-		
RE 620 SWN	26	-20...150	0.01	0.01	0.02	III, FL	1.3	0.20	0.15	0.03	-	-	-	-	-	-	-	-		
RE 630 SWN	26	-30...150	0.01	0.01	0.02	III, FL	1.3	0.30	0.24	0.10	0.02	-	-	-	-	-	-	-		
RE 1050 SWN	26	-50...150	0.01	0.01	0.02	III, FL	1.3	0.70	0.60	0.35	0.19	0.10	-	0.02	-	-	-	-		
RE 1225 SWN	26	-25...150	0.01	0.01	0.02	III, FL	1.3	0.30	0.24	0.09	0.04 ^③	-	-	-	-	-	-	-		
RE 2025 SWN	26	-25...150	0.01	0.01	0.02	III, FL	1.3	0.30	0.23	0.06	0.03 ^③	-	-	-	-	-	-	-		
RE 420 GWN	26	-20...200	0.01	0.01	0.02	III, FL	2.6	0.20	0.15	0.03	-	-	-	-	-	-	-	-		
RE 620 GWN	26	-20...200	0.01	0.01	0.02	III, FL	2.6	0.20	0.15	0.03	-	-	-	-	-	-	-	-		
RE 630 GWN	26	-30...200	0.01	0.01	0.02	III, FL	2.6	0.30	0.24	0.10	0.02	-	-	-	-	-	-	-		
RE 1050 GWN	26	-50...200	0.01	0.01	0.02	III, FL	2.6	0.70	0.60	0.35	0.19	0.10	-	0.02	-	-	-	-		
RE 1225 GWN	26	-25...200	0.01	0.01	0.02	III, FL	2.6	0.30	0.24	0.09	0.04 ^③	-	-	-	-	-	-	-		
RE 2025 GWN	26	-25...200	0.01	0.01	0.02	III, FL	2.6	0.30	0.23	0.06	0.03 ^③	-	-	-	-	-	-	-		
LAUDA Proline																				
RP 845	42	-45...200	0.1/0.01	0.01	0.01	III, FL	3.5	1.0	0.80	0.70	0.36	0.22	0.11	0.05	-	-	-	-		
RP 855	42	-55...200	0.1/0.01	0.01	0.01	III, FL	3.5	1.7	1.60	1.10	0.60	0.38	0.21	0.15	0.10	0.04	-	-		
RP 870	42	-70...200	0.1/0.01	0.01	0.02	III, FL	3.5	0.5	0.38	0.36	0.33	0.30	0.25	-	0.25	-	0.20	0.10		
RP 890	42	-90...200	0.1/0.01	0.01	0.02	III, FL	3.5	0.5	1.10	1.00	0.90	0.83	0.75	-	0.58	-	0.42	0.24		
RP 1290	43	-88...200	0.1/0.01	0.01	0.02	III, FL	3.5	0.5	1.10	1.00	0.90	0.83	0.75	-	0.58	-	0.42	0.24		
RP 1840	43	-40...200	0.1/0.01	0.01	0.01	III, FL	3.5	1.0	0.90	0.70	0.35	0.20	0.09	-	-	-	-	-		
RP 1845	43	-50...200	0.1/0.01	0.01	0.01	III, FL	3.5	1.7	1.60	1.10	0.55	0.32	0.18	0.10	0.045	-	-	-		
RP 3530	43	-35...200	0.1/0.01	0.01	0.02	III, FL	3.5	1.0	0.90	0.70	0.30	0.15	-	-	-	-	-	-		
RP 845 C	44	-45...200	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	1.0	0.80	0.70	0.36	0.22	0.11	0.05	-	-	-	-		
RP 855 C	44	-55...200	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	1.7	1.60	1.10	0.60	0.38	0.21	0.15	0.10	0.04	-	-		
RP 870 C	44	-70...200	0.01	0.1/0.01/0.001	0.02	III, FL	3.5	0.5	0.38	0.36	0.33	0.30	0.25	-	0.25	-	0.20	0.10		
RP 890 C	44	-90...200	0.01	0.1/0.01/0.001	0.02	III, FL	3.5	0.5	1.10	1.00	0.90	0.83	0.75	-	0.58	-	0.42	0.24		
RP 1290 C	45	-88...200	0.01	0.1/0.01/0.001	0.02	III, FL	3.5	0.5	1.10	1.00	0.90	0.83	0.75	-	0.58	-	0.42	0.24		
RP 1840 C	45	-40...200	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	1.0	0.90	0.70	0.35	0.20	0.09	-	-	-	-	-		
RP 1845 C	45	-50...200	0.01	0.1/0.01/0.001	0.01	III, FL	3.5	1.7	1.60	1.10	0.55	0.32	0.18	0.10	0.045	-	-	-		
RP 3530 C	45	-35...200	0.01	0.1/0.01/0.001	0.02	III, FL	3.5	1.0	0.90	0.70	0.30	0.15	-	-	-	-	-	-		
LAUDA Proline Kryomats																				
RP 3050 C	48	-50...200	0.01	0.1/0.01/0.001	0.05	III, FL	3.5	5.00	5.00	3.00	1.60	1.00	0.50	-	0.25	-	-	-		
RP 4050 C	48	-50...200	0.01	0.1/0.01/0.001	0.05	III, FL	3.5	5.00	5.00	3.00	1.60	1.00	0.50	-	0.25	-	-	-		
RP 3090 C	48	-90...200	0.01	0.1/0.01/0.001	0.05	III, FL	3.5	3.00	3.00	2.90	2.50	2.30	2.00	-	1.60	-	1.30	0.80		
RP 4090 C	48	-90...200	0.01	0.1/0.01/0.001	0.05	III, FL	3.5	3.00	3.00	2.90	2.50	2.30	2.00	-	1.60	-	1.30	0.80		
RP 3050 CW	49	-50...200	0.01	0.1/0.01/0.001	0.05	III, FL	3.5	6.00	6.00	3.50	1.80	1.10	0.60	-	0.25	-	-	-		
RP 4050 CW	49	-50...200	0.01	0.1/0.01/0.001	0.05	III, FL	3.5	6.00	6.00	3.50	1.80	1.10	0.60	-	0.25	-	-	-		
RP 3090 CW	49	-90...200	0.01	0.1/0.01/0.001	0.05	III, FL	3.5	4.00	4.00	3.70	3.10	2.70	2.30	-	1.80	-	1.40	0.90		
RP 4090 CW	49	-90...200	0.01	0.1/0.01/0.001	0.05	III, FL	3.5	4.00	4.00	3.70	3.10	2.70	2.30	-	1.80	-	1.40	0.90		

① At pump level 2 (ECO and Proline Kryomats) and pump level 3 (Proline) ② III, FL: for use with flammable and non-flammable liquids; I, NFL: only for non-inflammable liquids

③ Cooling output at -25 °C



	Pump type [®]	Pump pressure max.	Pump suction max.	Pump flow max. (pressure)	Pump flow max. (suction)	Pump connection thread	Ø Nipples	Bath volume min.	Bath volume max.	Bath opening (WxD)	Bath depth	Usable depth	Height top of bath	Dimensions (WxDxH)	Weight	Power supply [®]	Loading	Cat. No.	Type
	bar	bar	L/min	L/min	mm	mm	L	L	mm	mm	mm	mm	mm	mm	kg	V; Hz	kW		
LAUDA ECO with natural refrigerants																			
V	0.55	–	22	–	L [®]	13	3.3	4.0	130x105	160	140	374	180x396x555	22.5	230; 50	1.6	LCK 1954	RE 420 SWN	
V	0.55	–	22	–	L [®]	13	4.6	5.7	150x130	160	140	400	200x430x581	24.3	230; 50	1.6	LCK 1956	RE 620 SWN	
V	0.55	–	22	–	L [®]	13	4.6	5.7	150x130	160	140	400	200x430x581	28.2	230; 50	1.7	LCK 1958	RE 630 SWN	
V	0.55	–	22	–	L [®]	13	8.0	10.0	200x200	160	140	443	280x440x624	35.6	230; 50	2.0	LCK 1960	RE 1050 SWN	
V	0.55	–	22	–	L [®]	13	9.3	12.0	200x200	200	180	443	250x435x624	31.2	230; 50	1.7	LCK 1962	RE 1225 SWN	
V	0.55	–	22	–	L [®]	13	14.0	20.0	300x350	160	140	443	350x570x624	38.4	230; 50	1.7	LCK 1964	RE 2025 SWN	
V	0.55	–	22	–	M16 x 1	13	3.3	4.0	130x105	160	140	374	180x396x555	22.9	230; 50	2.8	LCK 1955	RE 420 GWN	
V	0.55	–	22	–	M16 x 1	13	4.6	5.7	150x130	160	140	400	200x430x581	24.7	230; 50	2.8	LCK 1957	RE 620 GWN	
V	0.55	–	22	–	M16 x 1	13	4.6	5.7	150x130	160	140	400	200x430x581	28.6	230; 50	2.9	LCK 1959	RE 630 GWN	
V	0.55	–	22	–	M16 x 1	13	8.0	10.0	200x200	160	140	443	280x440x624	36.0	230; 50	3.3	LCK 1961	RE 1050 GWN	
V	0.55	–	22	–	M16 x 1	13	9.3	12.0	200x200	200	180	443	250x435x624	31.6	230; 50	2.9	LCK 1963	RE 1225 GWN	
V	0.55	–	22	–	M16 x 1	13	14.0	20.0	300x350	160	140	443	350x570x624	38.5	230; 50	2.9	LCK 1965	RE 2025 GWN	

LAUDA Proline																		
VF	0.7	0.4	25	23	M16 x 1	13	5.5	8.5	150x150	200	180	488	285x430x688	41.0	230; 50	3.6	LCK 1885	RP 845
VF	0.7	0.4	25	23	M16 x 1	13	5.5	8.5	150x150	200	180	570	400x540x770	60.0	230; 50	3.6	LCK 1893	RP 855
VF	0.7	0.4	25	23	M16 x 1	13	5.5	8.5	150x150	200	180	535	375x540x735	68.0	230; 50	3.6	LCK 1895	RP 870
VF	0.7	0.4	25	23	M16 x 1	13	5.5	8.0	150x150	200	180	535	495x615x735	100.0	230; 50	3.6	LCK 1897	RP 890
VF	0.7	0.4	25	23	M16 x 1	13	8.0	13.5	250x150	200	180	535	495x615x735	100.0	230; 50	3.6	LCK 1899	RP 1290
VF	0.7	0.4	25	23	M16 x 1	13	12.5	19.0	300x200	200	180	488	375x465x688	46.0	230; 50	3.6	LCK 1887	RP 1840
VF	0.7	0.4	25	23	M16 x 1	13	12.5	19.0	300x200	200	180	570	400x540x770	61.0	230; 50	3.6	LCK 1891	RP 1845
VF	0.7	0.4	25	23	M16 x 1	13	23.0	35.0	300x350	250	230	540	375x615x740	51.0	230; 50	3.6	LCK 1889	RP 3530
VF	0.7	0.4	25	23	M16 x 1	13	5.5	8.5	150x150	200	180	488	285x430x688 [®]	41.0	230; 50	3.6	LCK 1886	RP 845 C
VF	0.7	0.4	25	23	M16 x 1	13	5.5	8.5	150x150	200	180	570	400x540x770 [®]	60.0	230; 50	3.6	LCK 1894	RP 855 C
VF	0.7	0.4	25	23	M16 x 1	13	5.5	8.5	150x150	200	180	535	375x540x735 [®]	68.0	230; 50	3.6	LCK 1896	RP 870 C
VF	0.7	0.4	25	23	M16 x 1	13	5.5	8.0	150x150	200	180	535	495x615x735 [®]	100.0	230; 50	3.6	LCK 1898	RP 890 C
VF	0.7	0.4	25	23	M16 x 1	13	8.0	13.5	250x150	200	180	535	495x615x735 [®]	100.0	230; 50	3.6	LCK 1900	RP 1290 C
VF	0.7	0.4	25	23	M16 x 1	13	12.5	19.0	300x200	200	180	488	375x465x688 [®]	46.0	230; 50	3.6	LCK 1888	RP 1840 C
VF	0.7	0.4	25	23	M16 x 1	13	12.5	19.0	300x200	200	180	570	400x540x770 [®]	61.0	230; 50	3.6	LCK 1892	RP 1845 C
VF	0.7	0.4	25	23	M16 x 1	13	23.0	35.0	300x350	250	230	540	375x615x740 [®]	51.0	230; 50	3.6	LCK 1890	RP 3530 C

LAUDA Proline Kryomats																		
V	0.5	–	19	–	M16 x 1	13	23.0	31.0	350x200	250	230	905	600x700x1160 [®]	130.0	400; 3/N/PE; 50	5.0	LUK 239	RP 3050 C
V	0.5	–	19	–	M16 x 1	13	32.0	44.0	350x350	250	230	905	600x700x1160 [®]	130.0	400; 3/N/PE; 50	5.0	LUK 241	RP 4050 C
V	0.5	–	19	–	M16 x 1	13	23.0	31.0	350x200	250	230	905	600x700x1160 [®]	155.0	400; 3/N/PE; 50	5.0	LUK 245	RP 3090 C
V	0.5	–	19	–	M16 x 1	13	32.0	44.0	350x350	250	230	905	600x700x1160 [®]	155.0	400; 3/N/PE; 50	5.0	LUK 247	RP 4090 C
V	0.5	–	19	–	M16 x 1	13	23.0	31.0	350x200	250	230	905	600x700x1160 [®]	130.0	400; 3/N/PE; 50	5.0	LUK 240	RP 3050 CW
V	0.5	–	19	–	M16 x 1	13	32.0	44.0	350x350	250	230	905	600x700x1160 [®]	130.0	400; 3/N/PE; 50	5.0	LUK 242	RP 4050 CW
V	0.5	–	19	–	M16 x 1	13	23.0	31.0	350x200	250	230	905	600x700x1160 [®]	155.0	400; 3/N/PE; 50	5.0	LUK 246	RP 3090 CW
V	0.5	–	19	–	M16 x 1	13	32.0	44.0	350x350	250	230	905	600x700x1160 [®]	155.0	400; 3/N/PE; 50	5.0	LUK 248	RP 4090 CW

[®] D: pressure pump; V: Vario pump, pressure pump with 6 selectable output steps for ECO and 4 selectable output steps for Proline Kryomats; VF: Varioflex pump, pressure/suction pump with 8 selectable output steps [®] Other power supply variants on page 101/102 [®] With Command remote control: 56 mm higher
[®] Pump connection sets for ECO Silver and ECO Gold available as accessories. See page 31.

LAUDA Technical data according to DIN 12876 standard



Technical data

Type	Page	Working temperature range (equal to ACC range)		Ambient temperature range	Resolution of setting	Resolution of indication	Control	Temperature stability ±K	Heater power kW	Effective cooling output (measured with ethanol, 20 °C ambient temperature 15 °C water temperature and 3 bar water pressure)									
		°C	°C							20 °C	10 °C	5 °C	0 °C	5 °C	-10 °C	-15 °C	-20 °C	-25 °C	-30 °C
LAUDA Integral T																			
T 1200	58	-25...120 [®]	5...40	0.1	0.05	↑ Proportional cooling with automatic refrigeration ↓	0.2	2.25	1.20	1.00	0.90	0.80	0.70	0.60	0.40	0.18	0.10	-	
T 1200 W	58	-25...120 [®]	5...40	0.1	0.05		0.2	2.25	1.60	1.30	1.20	1.10	0.85	0.70	0.45	0.25	0.10	-	
T 2200	58	-25...120 [®]	5...40	0.1	0.05		0.2	2.25	2.20	1.80	1.60	1.40	1.20	1.00	0.80	0.60	0.35	-	
T 2200 W	58	-25...120 [®]	5...40	0.1	0.05		0.2	2.25	2.70	2.30	2.10	1.90	1.70	1.40	1.00	0.68	0.42	-	
T 4600	59	-30...120 [®]	5...40	0.1	0.05		0.2	6	4.60	3.70	3.20	2.80	2.30	1.90	1.30	1.00	0.50	0.20	
T 4600 W	59	-30...120 [®]	5...40	0.1	0.05		0.2	6	5.50	4.50	4.00	3.40	2.90	2.30	1.70	1.10	0.65	0.30	
T 7000	59	-30...120 [®]	5...40	0.1	0.05		0.3	6	7.00	6.00	5.50	5.00	4.00	3.00	2.40	1.70	1.00	0.50	
T 7000 W	59	-30...120 [®]	5...40	0.1	0.05		0.3	6	8.50	7.00	6.30	5.50	4.70	3.90	3.00	2.00	1.30	0.60	
T 10000	59	-30...120 [®]	5...40	0.1	0.05		0.3	9	10.00	9.00	8.20	7.30	6.20	5.10	4.10	3.00	2.20	1.20	
T 10000 W	59	-30...120 [®]	5...40	0.1	0.05		0.3	9	13.00	11.00	9.90	8.70	7.40	6.00	4.90	3.70	2.60	1.50	

Type	Page	Working temperature range (equal to ACC -range)		Ambient temperature range	Resolution of setting	Compressor cooling	Temperature stability ±K	Effective cooling output (measured with pump step 4 at 20 °C ambient temperature/ 15 °C water temperature and 3 bar water pressure)															
		°C	°C					Heater power kW	300 °C with thermal oil kW	200 °C with thermal oil kW	100 °C with thermal oil kW	20 °C with ethanol kW	10 °C with ethanol kW	0 °C with ethanol kW	-10 °C with ethanol kW	-20 °C with ethanol kW	-30 °C with ethanol kW	-40 °C with ethanol kW	-50 °C with ethanol kW	-60 °C with ethanol kW	-70 °C with ethanol kW	-80 °C with ethanol kW	-90 °C with ethanol kW
LAUDA Integral XT																							
XT 150	62	-45...220	5...40	0.01	Air	0.05	3.5	-	1.50 [®]	1.50 [®]	1.50 [®]	1.30 [®]	1.10 [®]	1.00 [®]	0.62 [®]	0.28 [®]	0.06 [®]	-	-	-	-		
XT 280	62	-80...200	5...40	0.01	Air	0.10	4.0	-	1.50 [®]	1.50 [®]	1.50 [®]	1.50 [®]	1.40 [®]	1.40 [®]	1.30 [®]	1.30 [®]	1.30 [®]	1.20 [®]	1.00 [®]	0.40 [®]	0.10 [®]	-	
XT 550	62	-50...200	5...40	0.01	Air	0.05	5.3	-	5.00	5.00	5.00	5.00	4.60	3.40	2.20	1.25	0.60 [®]	0.15 [®]	-	-	-	-	
XT 750	62	-50...220	5...40	0.01	Air	0.05	5.3	-	7.00	7.00	6.70	6.10	4.80	3.40	2.20	1.25	0.60 [®]	0.30 [®]	-	-	-	-	
XT 750 H	62	-50...300	5...40	0.01	Air	0.05	5.3	5.5	7.00	7.00	6.70	6.10	4.80	3.40	2.20	1.25	0.60 [®]	0.30 [®]	-	-	-	-	
XT 250 W	63	-45...220	5...40	0.01	Water	0.05	3.5	-	2.10 [®]	2.10 [®]	2.10 [®]	1.80 [®]	1.30 [®]	1.00 [®]	0.62 [®]	0.28 [®]	0.06 [®]	-	-	-	-		
XT 350 W	63	-50...220	5...40	0.01	Water	0.10	3.5	-	3.10	3.10	3.10	3.10	3.10	2.00	1.20	0.70	0.25 [®]	0.02 [®]	-	-	-	-	
XT 350 HW	63	-50...300	5...40	0.01	Water	0.10	3.5	12	12.00	6.00	3.10	3.10	3.10	2.00	1.20	0.70	0.25 [®]	0.021 [®]	-	-	-	-	
XT 550 W	63	-50...200	5...40	0.01	Water	0.10	5.3	-	5.40	5.40	5.40	5.40	5.40	4.30	2.90	1.60	0.80 [®]	0.15 [®]	-	-	-	-	
XT 950 W	64	-50...220	5...40	0.01	Water	0.10	5.3	-	9.00	9.00	9.00	7.50	6.60	4.60	3.00	1.70	0.90 [®]	0.35 [®]	-	-	-	-	
XT 1850 W	64	-50...220	5...40	0.01	Water	0.30	10.6	-	18.50	18.50	18.50	12.50	10.30	7.70	5.90	3.80	2.20 [®]	1.20 [®]	-	-	-	-	
XT 1850 WS	64	-50...220	5...40	0.01	Water	0.30	16.0	-	18.50	18.50	18.50	12.50	10.30	7.70	5.90	3.80	2.20 [®]	1.20 [®]	-	-	-	-	
XT 490 W	64	-90...200	5...40	0.01	Water	0.10	5.3	-	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.00	3.30	2.30	1.35	0.70 [®]	0.20 [®]
XT 1590 W	64	-90...200	5...40	0.01	Water	0.30	8.0	-	15.00	15.00	15.00	13.00	10.50	9.20	8.50	8.50	7.00	5.30	3.70	1.80	0.90 [®]	0.35 [®]	

NEW

NEW

[®] Optional up to 150 °C [®] On pump output step 2



Pump pressure max.	Pump flow max. (pressure)	Pump connection thread	For tubing	Filling volume	Dimensions (WxDxH)	Pressure measurement/ parameter	Protection level	Noise level	Additional features	Weight	Loading	Power supply [®]	Cat. No.	Type
bar	L/min	i. d. (mm)		L	mm			dB(A)		kg	kW	V; Hz		
LAUDA Integral T														
3.2	40	G 3/4/(15)	3/4"	3...7	450x550x790	↑	IP 32	60	↑	77	2.7	230; 50	LWP 101	T 1200
3.2	40	G 3/4/(15)	3/4"	3...7	450x550x790	↑	IP 32	58	Level indication	82	2.7	230; 50	LWP 102	T 1200 W
3.2	40	G 3/4/(15)	3/4"	3...7	450x550x790	↑	IP 32	60	↓	89	3.1	230; 50	LWP 103	T 2200
3.2	40	G 3/4/(15)	3/4"	3...7	450x550x790	↑	IP 32	58	↓	94	3.1	230; 50	LWP 104	T 2200 W
3.2	40	G 3/4/(15)	3/4"	6...18	550x650x970	Digital/ Bypass	IP 32	63	↑	123	8.5	400; 3/N/PE; 50	LWP 205	T 4600
3.2	40	G 3/4/(15)	3/4"	6...18	550x650x970	Digital/ Bypass	IP 32	61	Level indication	128	8.3	400; 3/N/PE; 50	LWP 206	T 4600 W
6.0	60	G 1 1/4/(20)	1"	8...20	850x670x970	↓	IP 32	65	Level indication, additional pump for internal circulation	175	11.5	400; 3/N/PE; 50	LWP 207	T 7000
6.0	60	G 1 1/4/(20)	1"	8...20	850x670x970	↓	IP 32	63	↓	180	11.2	400; 3/N/PE; 50	LWP 208	T 7000 W
6.0	60	G 1 1/4/(20)	1"	8...20	1050x770x1120	↓	IP 32	69	↓	235	16.0	400; 3/N/PE; 50	LWP 209	T 10000
6.0	60	G 1 1/4/(20)	1"	8...20	850x670x970	↓	IP 32	67	↓	242	15.5	400; 3/N/PE; 50	LWP 210	T 10000 W

Pump pressure max.	Pump flow max. (pressure)	Pump connection thread	Filling volume min.	Filling volume expansion vessel	Dimensions (WxDxH)	Pressure measurement/ parameter	Protection level	Additional features	Weight	Loading	Power supply [®]	Cat. No.	Type
bar	L/min	i. d. (mm)	L	L	mm				kg	kW	V; Hz		
LAUDA Integral XT													
2.9	45	M30 x 1.5 (DN 20)	2.6	5.5	335x550x660	digital	IP21C	Level indication	87	3.68	230; 50	LWP 112	XT 150
2.9	45	M30 x 1.5 (DN 20)	5.0	6.7	460x550x1285	digital	IP21C	Level indication	180	9.00	400; 3/PE; 50	LWP 534	XT 280
2.9	45	M30 x 1.5 (DN 20)	5.0	6.7	460x550x1285	digital	IP21C	Level indication	150	7.80	400; 3/PE; 50	LWP 524	XT 550
2.9	45	M30 x 1.5 (DN 20)	5.0	6.7	460x550x1285	digital	IP21C	Level indication	155	7.80	400; 3/PE; 50	LWP 520	XT 750
2.9	45	M30 x 1.5 (DN 20)	5.3	6.7	460x550x1285	digital	IP21C	Level indication	160	7.80	400; 3/PE; 50	LWP 522	XT 750 H
2.9	45	M30 x 1.5 (DN 20)	2.6	5.5	335x550x660	digital	IP21C	Level indication	90	3.68	230; 50	LWP 113	XT 250 W
2.9	45	M30 x 1.5 (DN 20)	5.0	6.7	460x550x1285	digital	IP21C	Level indication	150	3.68	230; 50	LWP 117	XT 350 W
2.9	45	M30 x 1.5 (DN 20)	5.0	6.7	460x550x1285	digital	IP21C	Level indication	150	3.68	230; 50	LWP 119	XT 350 HW
2.9	45	M30 x 1.5 (DN 20)	5.0	6.7	460x550x1285	digital	IP21C	Level indication	155	7.80	400; 3/PE; 50	LWP 525	XT 550 W
2.9	45	M30 x 1.5 (DN 20)	5.0	6.7	460x550x1285	digital	IP21C	Level indication	160	7.80	400; 3/PE; 50	LWP 521	XT 950 W
5.8	90	M38 x 1.5 (DN 25)	9.0	17.4	700x550x1600	digital	IP21C	Level indication	250	13.80	400; 3/PE; 50	LWP 532	XT 1850 W
5.8	90	M38 x 1.5 (DN 25)	9.0	17.4	700x550x1600	digital	IP21C	Level indication	250	17.30	400; 3/PE; 50	LWP 533	XT 1850 WS
2.9	45	M30 x 1.5 (DN 20)	9.5	17.4	700x550x1600	digital	IP21C	Level indication	245	9.00	400; 3/PE; 50	LWP 539	XT 490 W
2.9	45	M30 x 1.5 (DN 20)	10.5	17.4	700x550x1600	digital	IP21C	Level indication	280	13.80	400; 3/PE; 50	LWP 542	XT 1590 W

® Other power supply variants on page 102

LAUDA Technical data according to DIN 12876 standard



Technical data

Type	Page	Working temperature range (equal to ACC-range)		Ambient temperature range	Resolution of setting	Resolution of indication	Control	Cooling output (measured with ethanol, 20 °C ambient temperature)											Heater power
		°C	°C					±K	20 °C kW	10 °C kW	5 °C kW	0 °C kW	-5 °C kW	-10 °C kW	-15 °C kW	-20 °C kW	-25 °C kW	-30 °C kW	
LAUDA WK class																			
WK 300	70	0...40	5...35	0.1/1	0.1		↑	0.5	0.31	0.25	0.21	0.17	-	-	-	-	-		
WK 500	70	0...40	5...40	0.1	0.1		↑	0.5	0.50	0.30	0.18	0.05	-	-	-	-	-		
WK 502	70	0...40	5...40	0.1	0.1		↑	0.5	0.60	0.50	0.40	0.30	-	-	-	-	-		
WK 1200	71	0...40	5...40	0.1	0.1		↑	0.5	1.20	0.90	0.60	0.28	-	-	-	-	-		
WK 1200 W	71	0...40	5...40	0.1	0.1		↑	0.5	1.50	1.10	0.80	0.32	-	-	-	-	-		
WK 1400	71	0...40	5...40	0.1	0.1		↑	0.5	1.40	1.10	0.80	0.50	-	-	-	-	-		
WK 1400 W	71	0...40	5...40	0.1	0.1	Compressor on/off	↑	0.5	1.70	1.30	1.00	0.70	-	-	-	-	-		
WK 2200	71	0...40	5...40	0.1	0.1		↓	1	2.20	1.60	1.20	0.80	-	-	-	-	-		
WK 2200 W	71	0...40	5...40	0.1	0.1		↓	1	2.60	1.90	1.50	1.00	-	-	-	-	-		
WK 2400	71	0...40	5...40	0.1	0.1		↓	1	2.40	1.80	1.40	1.00	-	-	-	-	-		
WK 2400 W	71	0...40	5...40	0.1	0.1		↓	1	2.80	2.10	1.70	1.20	-	-	-	-	-		
WK 3200	72	0...40	5...40	0.1	0.1		↓	1	3.50	3.00	2.30	1.20	-	-	-	-	-		
WK 3200 W	72	0...40	5...40	0.1	0.1		↓	1	4.00	3.50	2.60	1.50	-	-	-	-	-		
WK 4600	72	0...40	5...40	0.1	0.1		↓	0.5	4.60	3.40	2.30	1.20	-	-	-	-	-		
WK 4600 W	72	0...40	5...40	0.1	0.1		↓	0.5	5.30	4.00	2.60	1.50	-	-	-	-	-		
WK 7000	72	0...40	5...40	0.1	0.1		↓	0.5	7.00	6.00	5.50	5.00	-	-	-	-	-		
WK 7000 W	72	0...40	5...40	0.1	0.1	Solenoid valve counter acting	↓	0.5	8.50	7.00	6.30	5.50	-	-	-	-	-		
WK 10000	72	0...40	5...40	0.1	0.1		↓	0.5	10.00	9.00	8.20	7.30	-	-	-	-	-		
WK 10000 W	72	0...40	5...40	0.1	0.1		↓	0.5	13.00	11.00	9.90	8.70	-	-	-	-	-		
WKL 230	73	-10...40	5...35	0.1/1	0.1/1*		↑	0.5	0.23	0.19	0.18	0.16	0.13	0.10	-	-	-		
WKL 600	73	-25...40	5...40	0.1/1	0.1/1*		↑	1	0.65	0.55	0.49	0.43	0.38	0.33	-	0.20	0.12		
WKL 603	73	-20...40	5...40	0.1/1	0.1/1*		↑	1	0.52	0.42	0.37	0.30	0.25	0.20	0.13	0.07	-		
WKL 900	73	-20...40	5...40	0.1/1	0.1/1*		↑	1	0.95	0.84	0.74	0.64	0.52	0.40	0.28	0.15	-		
WKL 903	73	-15...40	5...40	0.1/1	0.1/1*		↑	1	0.80	0.70	0.60	0.50	0.38	0.26	0.13	-	-		
WKL 1000	73	-10...40	5...40	0.1/1	0.1/1*		↑	0.5	1.00	0.80	0.66	0.51	0.38	0.24	-	-	-		
WKL 1200	74	-10...40	5...40	0.1/1	0.1/1*		↑	0.5	1.20	1.00	0.90	0.80	0.70	0.60	0.40**	0.18**	0.10**		
WKL 1200 W	74	-10...40	5...40	0.1/1	0.1/1*		↑	0.5	1.60	1.30	1.20	1.10	0.85	0.70	0.45**	0.25**	0.10**		
WKL 2200	74	-10...40	5...40	0.1/1	0.1/1*		↑	1	2.20	1.80	1.60	1.40	1.20	1.00	0.80**	0.60**	0.35**		
WKL 2200 W	74	-10...40	5...40	0.1/1	0.1/1*		↑	1	2.70	2.30	2.10	1.90	1.70	1.40	1.00**	0.68**	0.42**		
WKL 3200	74	-10...40	5...40	0.1/1	0.1/1*		↑	1	3.50	2.80	2.40	2.00	1.70	1.30	1.00**	0.60**	0.30**		
WKL 3200 W	74	-10...40	5...40	0.1/1	0.1/1*		↑	1	4.20	3.30	2.90	2.20	1.80	1.40	1.10**	0.70**	0.40**		
WKL 4600	74	-10...40	5...40	0.1/1	0.1/1*		↑	0.5	4.60	3.70	3.20	2.40	1.90	1.50	1.10**	0.70**	0.40**		
WKL 4600 W	74	-10...40	5...40	0.1/1	0.1/1*	Solenoid valve counter acting	↑	0.5	5.30	4.20	3.60	2.80	2.20	1.70	1.20**	0.80**	0.50**		
WKL 7000	74	-30...40	5...40	0.1/1	0.1/1*		↓	0.5	7.00	6.00	5.50	5.00	4.00	3.00	2.40	1.70	1.00	0.50	
WKL 7000 W	74	-30...40	5...40	0.1/1	0.1/1*		↓	0.5	8.50	7.00	6.30	5.50	4.70	3.90	3.00	2.00	1.30	0.60	
WKL 10000	74	-30...40	5...40	0.1/1	0.1/1*		↓	0.5	10.00	9.00	8.20	7.30	6.20	5.10	4.10	3.00	2.20	1.20	
WKL 10000 W	74	-30...40	5...40	0.1/1	0.1/1*		↓	0.5	13.00	11.00	9.90	8.70	7.40	6.00	4.90	3.70	2.60	1.50	

① Other power supply variants on page 103

* Resolution below -9,9 °C

** Cooling output at optionally enlarged temperature range down to -25 °C



Pump pressure max.	Pump flow max.	Pump connection (pressure)	Pump connection thread (inner diameter in mm)	For tubings	Filling volume	Dimensions (WxDxH)	Pressure measurement/parameter	Protection level	Noise level	Additional features	Weight	Loading	Power supply ^①	Cat. No.	Type
bar	L/min	i. d. (mm)		L	mm				dB(A)		kg	kW	V; Hz		
LAUDA WK class															
0.15	8	Ø 10 mm	8...9 mm	4...6	200x350x500	No	IP 32	47		↑	24	0.35	230; 50	LWM 117	WK 300
1.0	30	M16 x 1/(10)	1/2"	8...12	350x480x595	No	IP 32	50			46	0.47	230; 50	LWG 132	WK 500
2.2	33	M16 x 1/(10)	1/2"	8...12	350x480x715	No	IP 32	55			50	0.9	230; 50	LWG 140	WK 502
3.2	40	G 3/4/(15)	3/4"	16...23	450x550x790	↑	IP 32	59			75	1.2	230; 50	LWG 133	WK 1200
3.2	40	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	57			75	1.2	230; 50	LWG 161	WK 1200 W
1.0	30	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	56			69	1.0	230; 50	LWG 137	WK 1400
1.0	30	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	54			69	1.0	230; 50	LWG 162	WK 1400 W
3.2	40	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	59		Level indication	87	1.6	230; 50	LWG 134	WK 2200
3.2	40	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	57			87	1.6	230; 50	LWG 163	WK 2200 W
1.0	30	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	57			81	1.4	230; 50	LWG 138	WK 2400
1.0	30	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	55			81	1.4	230; 50	LWG 164	WK 2400 W
3.2	40	G 3/4/(15)	3/4"	32...45	550x650x970	Analog/ Bypass	IP 32	62			120	2.0	400; 3/N/PE; 50	LWG 235	WK 3200
3.2	40	G 3/4/(15)	3/4"	32...45	550x650x970		IP 32	62			120	2.0	400; 3/N/PE; 50	LWG 265	WK 3200 W
3.2	40	G 3/4/(15)	3/4"	32...45	550x650x970		IP 32	63			123	2.5	400; 3/N/PE; 50	LWG 236	WK 4600
3.2	40	G 3/4/(15)	3/4"	32...45	550x650x970		IP 32	63			128	2.3	400; 3/N/PE; 50	LWG 258	WK 4600 W
3.2	40	G 3/4/(15)	3/4"	32...45	850x670x970		IP 32	65			172	5.0	400; 3/N/PE; 50	LWG 245	WK 7000
3.2	40	G 3/4/(15)	3/4"	32...45	850x670x970		IP 32	63		Level indication, additional pump for internal circulation	177	4.7	400; 3/N/PE; 50	LWG 247	WK 7000 W
3.2	40	G 3/4/(15)	3/4"	32...45	1050x770x1120		IP 32	69			233	6.5	400; 3/N/PE; 50	LWG 249	WK 10000
3.2	40	G 3/4/(15)	3/4"	32...45	850x670x970		IP 32	67			240	6.0	400; 3/N/PE; 50	LWG 251	WK 10000 W
0.15	8	Ø 10mm	8...9 mm	4...6	200x350x500	No	IP 32	47		↑	24	0.3	230; 50/60	LWM 016	WKL 230
1.0	30	M16 x 1/(10)	1/2"	8...12	350x480x595	No	IP 32	53			46	0.7	230; 50	LWG 141	WKL 600
3.2	33	M16 x 1/(10)	1/2"	8...12	350x480x715	No	IP 32	57			50	0.9	230; 50	LWG 142	WKL 603
1.0	30	M16 x 1/(10)	1/2"	8...12	350x480x595	No	IP 32	54			46	0.8	230; 50	LWG 159	WKL 900
3.2	33	M16 x 1/(10)	1/2"	8...12	350x480x715	No	IP 32	57			50	1.0	230; 50	LWG 160	WKL 903
1.0	30	M16 x 1/(10)	1/2"	8...12	350x480x595	No	IP 32	50			46	1.1	230; 50	LWG 173	WKL 1000
3.2	40	G 3/4/(15)	3/4"	16...23	450x550x790	↑	IP 32	60		Level indication	75	1.6	230; 50	LWG 153	WKL 1200
3.2	40	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	58			75	1.6	230; 50	LWG 166	WKL 1200 W
3.2	40	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	60			69	2.2	230; 50	LWG 154	WKL 2200
3.2	40	G 3/4/(15)	3/4"	16...23	450x550x790		IP 32	58			69	2.2	230; 50	LWG 167	WKL 2200 W
3.2	40	G 3/4/(15)	3/4"	32...45	550x650x970		IP 32	62			120	2.8	400; 3/N/PE; 50	LWG 255	WKL 3200
3.2	40	G 3/4/(15)	3/4"	32...45	550x650x970	Analog/ Bypass	IP 32	62			120	2.8	400; 3/N/PE; 50	LWG 268	WKL 3200 W
3.2	40	G 3/4/(15)	3/4"	32...45	550x650x970		IP 32	63			123	3.5	400; 3/N/PE; 50	LWG 256	WKL 4600
3.2	40	G 3/4/(15)	3/4"	32...45	550x650x970		IP 32	61			130	3.3	400; 3/N/PE; 50	LWG 257	WKL 4600 W
6.0	60	G 1 1/4/(20)	1"	32...45	850x670x970		IP 32	65			175	5.5	400; 3/N/PE; 50	LWG 246	WKL 7000
6.0	60	G 1 1/4/(20)	1"	32...45	850x670x970		IP 32	63		Level indication, additional pump for internal circulation	180	5.2	400; 3/N/PE; 50	LWG 248	WKL 7000 W
6.0	60	G 1 1/4/(20)	1"	32...45	1050x770x1120		IP 32	69			235	7.0	400; 3/N/PE; 50	LWG 250	WKL 10000
6.0	60	G 1 1/4/(20)	1"	32...45	850x670x970		IP 32	67			242	6.5	400; 3/N/PE; 50	LWG 252	WKL 10000 W

LAUDA Power supply variants



Power supply variants

Type	Cat. No.	Heater power kW	Loading kW	Cat. No.	Heater power kW	Loading kW	Cat. No.	Heater power kW	Loading kW
230 V; 50/60 Hz									
LAUDA Aqualine – single phase									
AL 2	LCB 0723	0.5	0.6	LCB 4723	0.45	0.6	LCB 6723	0.34	0.5
AL 5	LCB 0724	0.5	0.6	LCB 4724	0.45	0.6	LCB 6724	0.34	0.5
AL 12	LCB 0725	1.0	1.1	LCB 4725	1.0	1.1	LCB 6725	0.76	0.9
AL 18	LCB 0726	1.2	1.3	LCB 4726	1.2	1.3	LCB 6726	0.9	1.0
AL 25	LCB 0727	1.2	1.3	LCB 4727	1.2	1.3	LCB 6727	0.9	1.0

115 V; 60 Hz									
LAUDA Alpha – single phase									
A	LCEX 0226	1.5	1.5	LCEX 4226	1.15	1.2	LCEX 6226	1.0	1.0
A 6	LCBX 0733	1.5	1.5	LCBX 4733	1.15	1.2	LCBX 6733	1.0	1.0
A 12	LCBX 0734	1.5	1.5	LCBX 4734	1.15	1.2	LCBX 6734	1.0	1.0
A 24	LCBX 0735	1.5	1.5	LCBX 4735	1.15	1.2	LCBX 6735	1.0	1.0

230 V; 50/60 Hz				220 V; 60 Hz			115 V; 60 Hz			100 V; 50/60 Hz		
LAUDA ECO – single phase												
Silver	LCE 0227	1.3	1.4	LCE 2227	1.2	1.3	LCE 4227	1.3	1.4	LCE 6227	1.0	1.1
Gold	LCE 0228	2.6	2.7	LCE 2228	2.4	2.5	LCE 4228	1.3	1.4	LCE 6228	1.0	1.1
E 4 S	LCB 0736	1.3	1.4	LCB 2736	1.2	1.3	LCB 4736	1.3	1.4	LCB 6736	1.0	1.1
E 10 S	LCB 0738	1.3	1.4	LCB 2738	1.2	1.3	LCB 4738	1.3	1.4	LCB 6738	1.0	1.1
E 15 S	LCB 0740	1.3	1.4	LCB 2740	1.2	1.3	LCB 4740	1.3	1.4	LCB 6740	1.0	1.1
E 20 S	LCB 0742	1.3	1.4	LCB 2742	1.2	1.3	LCB 4742	1.3	1.4	LCB 6742	1.0	1.1
E 25 S	LCB 0744	1.3	1.4	LCB 2744	1.2	1.3	LCB 4744	1.3	1.4	LCB 6744	1.0	1.1
E 40 S	LCB 0746	1.3	1.4	LCB 2746	1.2	1.3	LCB 4746	1.3	1.4	LCB 6746	1.0	1.1
E 4 G	LCB 0737	2.6	2.7	LCB 2737	2.4	2.5	LCB 4737	1.3	1.4	LCB 6737	1.0	1.1
E 10 G	LCB 0739	2.6	2.7	LCB 2739	2.4	2.5	LCB 4739	1.3	1.4	LCB 6739	1.0	1.1
E 15 G	LCB 0741	2.6	2.7	LCB 2741	2.4	2.5	LCB 4741	1.3	1.4	LCB 6741	1.0	1.1
E 20 G	LCB 0743	2.6	2.7	LCB 2743	2.4	2.5	LCB 4743	1.3	1.4	LCB 6743	1.0	1.1
E 25 G	LCB 0745	2.6	2.7	LCB 2745	2.4	2.5	LCB 4745	1.3	1.4	LCB 6745	1.0	1.1
E 40 G	LCB 0747	2.6	2.7	LCB 2747	2.4	2.5	LCB 4747	1.3	1.4	LCB 6747	1.0	1.1
ET 6 S	LCM 0096	1.3	1.4	LCM 2096	1.2	1.3	LCM 4096	1.3	1.4	LCM 6096	1.0	1.1
ET 12 S	LCD 0286	1.3	1.4	LCD 2286	1.2	1.3	LCD 4286	1.3	1.4	LCD 6286	1.0	1.1
ET 15 S	LCD 0288	1.3	1.4	LCD 2288	1.2	1.3	LCD 4288	1.3	1.4	LCD 6288	1.0	1.1
ET 20 S	LCD 0290	1.3	1.4	LCD 2290	1.2	1.3	LCD 4290	1.3	1.4	LCD 6290	1.0	1.1
ET 6 G	LCM 0097	2.6	2.7	LCM 2097	2.4	2.5	LCM 4097	1.3	1.4	LCM 6097	1.0	1.1
ET 12 G	LCD 0287	2.6	2.7	LCD 2287	2.4	2.5	LCD 4287	1.3	1.4	LCD 6287	1.0	1.1
ET 15 G	LCD 0289	2.6	2.7	LCD 2289	2.4	2.5	LCD 4289	1.3	1.4	LCD 6289	1.0	1.1
ET 20 G	LCD 0291	2.6	2.7	LCD 2291	2.4	2.5	LCD 4291	1.3	1.4	LCD 6291	1.0	1.1

230 V; 50/60 Hz				115 V; 60 Hz			100 V; 50/60 Hz			200 V; 50/60 Hz			208-220 V; 60 Hz		
LAUDA Proline – single phase															
P 5	LCB 0708	3.5	3.6	LCB 4708	1.8	1.8	LCB 6708	1.4	1.4	LCB 5708	2.8	2.9	LCB 8708	3.5	3.6
P 8	LCB 0710	3.5	3.6	LCB 4710	1.8	1.8	LCB 6710	1.4	1.4	LCB 5710	2.8	2.9	LCB 8710	3.5	3.6
P 12	LCB 0716	3.5	3.6	LCB 4716	1.8	1.8	LCB 6716	1.4	1.4	LCB 5716	2.8	2.9	LCB 8716	3.5	3.6
P 18	LCB 0712	3.5	3.6	LCB 4712	1.8	1.8	LCB 6712	1.4	1.4	LCB 5712	2.8	2.9	LCB 8712	3.5	3.6
P 26	LCB 0714	3.5	3.6	LCB 4714	1.8	1.8	LCB 6714	1.4	1.4	LCB 5714	2.8	2.9	LCB 8714	3.5	3.6
P 40	LCB 0728	3.5	3.6	LCB 4728	1.8	1.8	-	-	-	-	-	-	-	-	
P 50	LCB 0730	3.5	3.6	LCB 4730	1.8	1.8	-	-	-	-	-	-	-	-	
P 5 C	LCB 0709	3.5	3.6	LCB 4709	1.8	1.8	LCB 6709	1.4	1.4	LCB 5709	2.8	2.9	LCB 8709	3.5	3.6
P 8 C	LCB 0711	3.5	3.6	LCB 4711	1.8	1.8	LCB 6711	1.4	1.4	LCB 5711	2.8	2.9	LCB 8711	3.5	3.6
P 12 C	LCB 0717	3.5	3.6	LCB 4717	1.8	1.8	LCB 6717	1.4	1.4	LCB 5717	2.8	2.9	LCB 8717	3.5	3.6
P 18 C	LCB 0713	3.5	3.6	LCB 4713	1.8	1.8	LCB 6713	1.4	1.4	LCB 5713	2.8	2.9	LCB 8713	3.5	3.6
P 26 C	LCB 0715	3.5	3.6	LCB 4715	1.8	1.8	LCB 6715	1.4	1.4	LCB 5715	2.8	2.9	LCB 8715	3.5	3.6
P 40 C	LCB 0729	3.5	3.6	LCB 4729	1.8	1.8	-	-	-	-	-	-	-	-	
P 50 C	LCB 0731	3.5	3.6	LCB 4731	1.8	1.8	-	-	-	-	-	-	-	-	
PV 15	LCD 0276	3.5	3.6	LCD 4276	1.8	1.8	LCD 6276	1.4	1.4	-	-	-	-	-	
PV 24	LCD 0278	3.5	3.6	-	-	-	-	-	LCD 5278	2.8	2.9	LCD 8278	3.5	3.6	
PV 36	LCD 0280	3.5	3.6	-	-	-	-	-	LCD 5280	2.8	2.9	LCD 8280	3.5	3.6	
PV 15 C	LCD 0277	3.5	3.6	LCD 4277	1.8	1.8	LCD 6277	1.4	1.4	-	-	-	-	-	
PV 24 C	LCD 0279	3.5	3.6	-	1.8	1.8	-	1.4	1.4	LCD 5279	2.8	2.9	LCD 8279	3.5	3.6
PV 36 C	LCD 0281	3.5	3.6	-	1.8	1.8	-	1.4	1.4	LCD 5281	2.8	2.9	LCD 8281	3.5	3.6
PVL 15	LCD 0282	3.5	3.6	LCD 4282	1.8	1.8	LCD 6282	1.4	1.4	-	-	-	-	-	
PVL 24	LCD 0284	3.5	3.6	LCD 4284	1.8	1.8	LCD 6284	1.4	1.4	-	-	-	-	-	

Cat. No.
Heater power kW
Loading kW

Cat. No.
Heater power kW
Loading kW



Type	Cat. No.	Heater power kW	Loading kW	Cat. No.	Heater power kW	Loading kW	Cat. No.	Heater power kW	Loading kW
230 V; 50/60 Hz			115 V; 60 Hz			100 V; 50/60 Hz			
LAUDA Proline – single phase									
PVL 15 C	LCD 0283	3.5	3.6	LCD 4283	1.8	1.8	LCD 6283	1.4	1.4
PVL 24 C	LCD 0285	3.5	3.6	LCD 4285	1.8	1.8	LCD 6285	1.4	1.4
PB	LCG 0090	3.5	3.6	LCG 4090	1.8	1.8	LCG 6090	1.4	1.4
PB C	LCG 0091	3.5	3.6	LCG 4091	1.8	1.8	LCG 6091	1.4	1.4
PBD	LCG 0092	3.5	3.6	LCG 4092	1.8	1.8	LCG 6092	1.4	1.4
PBD C	LCG 0093	3.5	3.6	LCG 4093	1.8	1.8	LCG 6093	1.4	1.4

230 V; 50/60 Hz			230 V; 60 Hz		400 V; 3/N/PE; 50 Hz		440-480 V; 3/PE 60 Hz		
LAUDA Ultra – single phase									
USH 400	LTH 109	3.0	3.2	LTH 209	3.0	3.2	USH 400/6	LTH 211	5.6 5.8
							LTH 611	5.6	5.8

230 V; 50/60 Hz			230 V; 50 Hz		230 V; 60 Hz		115 V; 60 Hz		200 V; 50/60 Hz		100 V; 50/60 Hz		208-220 V; 60 Hz		
LAUDA Calibration thermostats – single phase															
RE 212 J	–	–	–	LCK 1879	2.25	2.3	LCK 2879	2.25	2.3	–	–	–	–	–	
RE 312 J	–	–	–	LCK 1880	2.25	2.3	LCK 2880	2.25	2.3	–	–	–	–	–	
PJ 12	LCB 0720	3.5	3.6	–	–	–	–	–	–	LCB 5720	2.8	2.9	LCB 6720	1.4	1.4
PJ 12 C	LCB 0721	3.5	3.6	–	–	–	–	–	–	LCB 5721	2.8	2.9	LCB 6721	1.4	1.4
PJL 12	LCB 0718	3.5	3.6	–	–	–	–	–	–	LCB 5718	2.8	2.9	LCB 6718	1.4	1.4
PJL 12 C	LCB 0719	3.5	3.6	–	–	–	–	–	–	LCB 5719	2.8	2.9	LCB 6719	1.4	1.4
UB 20 J	–	–	–	LTB 136	3.0	3.2	LTB 236	3.0	3.2	–	–	–	–	–	
UB 30 J	–	–	–	LTB 137	3.0	3.2	LTB 237	3.0	3.2	–	–	–	–	–	
UB 40 J	–	–	–	LTB 138	3.0	3.2	LTB 238	3.0	3.2	–	–	–	–	–	
UB 65 J	–	–	–	LTB 142	3.0	3.2	LTB 242	3.0	3.2	–	–	–	–	–	
UB 20 JL	–	–	–	LTB 143	3.0	3.2	LTB 243	3.0	3.2	–	–	–	–	–	
UB 30 JL	–	–	–	LTB 144	3.0	3.2	LTB 244	3.0	3.2	–	–	–	–	–	
UB 40 JL	–	–	–	LTB 145	3.0	3.2	LTB 245	3.0	3.2	–	–	–	–	–	
UB 20 F	–	–	–	LTB 139	1.2	3.2	LTB 239	3.0	3.2	–	–	–	–	–	

230 V; 50 Hz			115 V; 60 Hz		100 V; 50/60 Hz	
LAUDA Alpha – single phase						
RA 8	LCKX 1907	1.5	1.8	LCKX 4907	1.15	1.5
RA 12	LCKX 1908	1.5	1.8	LCKX 4908	1.15	1.5
RA 24	LCKX 1909	1.5	1.8	LCKX 4909	1.15	1.5
				LCKX 6907	1.0	1.3
				LCKX 6908	1.0	1.3
				LCKX 6909	1.0	1.3

230 V; 50 Hz			220 V; 60 Hz		115 V; 60 Hz		100 V; 50/60 Hz		only 230 V; 50 Hz				
LAUDA ECO – single phase										LAUDA ECO natural refrigerant – single phase			
RE 415 S	LCK 1910	1.3	1.5	LCK 2910	1.2	1.4	LCK 4910	1.3	1.5	RE 420 SN	LCK 1940	1.3	1.5
RE 420 S	LCK 1912	1.3	1.5	LCK 2912	1.2	1.4	LCK 4912	1.3	1.5	RE 620 SN	LCK 1942	1.3	1.5
RE 620 S	LCK 1914	1.3	1.5	LCK 2914	1.2	1.4	LCK 4914	1.3	1.5	RE 630 SN	LCK 1944	1.3	1.6
RE 630 S	LCK 1916	1.3	1.6	LCK 2916	1.2	1.5	LCK 4916	1.3	1.6	RE 1050 SN	LCK 1946	1.3	2.0
RE 1050 S	LCK 1918	1.3	2.0	LCK 2918	1.2	1.9	LCK 4918	1.3	2.0	RE 1225 SN	LCK 1948	1.3	1.6
RE 1225 S	LCK 1920	1.3	1.6	LCK 2920	1.2	1.5	LCK 4920	1.3	1.6	RE 2025 SN	LCK 1950	1.3	1.6
RE 2025 S	LCK 1922	1.3	1.5	LCK 2922	1.2	1.5	LCK 4922	1.3	1.6	–	–	–	–
RE 415 G	LCK 1911	2.6	2.8	LCK 2911	2.4	2.6	LCK 4911	1.3	1.5	RE 420 GN	LCK 1941	2.6	2.8
RE 420 G	LCK 1913	2.6	2.8	LCK 2913	2.4	2.6	LCK 4913	1.3	1.5	RE 620 GN	LCK 1943	2.6	2.8
RE 620 G	LCK 1915	2.6	2.8	LCK 2915	2.4	2.6	LCK 4915	1.3	1.5	RE 630 GN	LCK 1945	2.6	2.9
RE 630 G	LCK 1917	2.6	2.9	LCK 2917	2.4	2.7	LCK 4917	1.3	1.6	RE 1050 GN	LCK 1947	2.6	3.3
RE 1050 G	LCK 1919	2.6	3.3	LCK 2919	2.4	3.1	LCK 4919	1.3	2.0	RE 1225 GN	LCK 1949	2.6	2.9
RE 1225 G	LCK 1921	2.6	2.9	LCK 2921	2.4	2.7	LCK 4921	1.3	1.6	RE 2025 GN	LCK 1951	2.6	2.9
RE 2025 G	LCK 1923	2.6	2.9	LCK 2923	2.4	2.7	LCK 4923	1.3	1.6	–	–	–	–
RE 415 SW	LCK 1924	1.3	1.5	LCK 2924	1.2	1.4	LCK 4924	1.3	1.5	RE 420 SWN	LCK 1954	1.3	1.5
RE 420 SW	LCK 1926	1.3	1.5	LCK 2926	1.2	1.4	LCK 4926	1.3	1.5	RE 620 SWN	LCK 1956	1.3	1.5
RE 620 SW	LCK 1928	1.3	1.5	LCK 2928	1.2	1.4	LCK 4928	1.3	1.5	RE 630 SWN	LCK 1958	1.3	1.6
RE 630 SW	LCK 1930	1.3	1.6	LCK 2930	1.2	1.5	LCK 4930	1.3	1.6	RE 1050 SWN	LCK 1960	1.3	2.0
RE 1050 SW	LCK 1932	1.3	2.0	LCK 2932	1.2	1.9	LCK 4932	1.3	2.0	RE 1225 SWN	LCK 1962	1.3	1.6
RE 1225 SW	LCK 1934	1.3	1.6	LCK 2934	1.2	1.5	LCK 4934	1.3	1.6	RE 2025 SWN	LCK 1964	1.3	1.6
RE 2025 SW	LCK 1936	1.3	1.6	LCK 2936	1.2	1.5	LCK 4936	1.3	1.6	–	–	–	–
RE 415 GW	LCK 1925	2.6	2.8	LCK 2925	2.4	2.6	LCK 4925	1.3	1.5	RE 420 GWN	LCK 1955	2.6	2.8
RE 420 GW	LCK 1927	2.6	2.8	LCK 2927	2.4	2.6	LCK 4927	1.3	1.5	RE 620 GWN	LCK 1957	2.6	2.8
RE 620 GW	LCK 1929	2.6	2.8	LCK 2929	2.4	2.6	LCK 4929	1.3	1.5	RE 630 GWN	LCK 1959	2.6	2.9
RE 630 GW	LCK 1931	2.6	2.9	LCK 2931	2.4	2.7	LCK 4931	1.3	1.6	RE 1050 GWN	LCK 1961	2.6	3.3
RE 1050 GW	LCK 1933	2.6	3.3	LCK 2933	2.4	3.1	LCK 4933	1.3	2.0	RE 1225 GWN	LCK 1963	2.6	2.9
RE 1225 GW	LCK 1935	2.6	2.9	LCK 2935	2.4	2.7	LCK 4935	1.3	1.6	RE 2025 GWN	LCK 1965	2.6	2.9
RE 2025 GW	LCK 1937	2.6	2.9	LCK 2937	2.4	2.7	LCK 4937	1.3	1.6				



LAUDA Power supply variants



Type	Cat. No.	Heater power kW	Loading kW	Cat. No.	Heater power kW	Loading kW	Cat. No.	Heater power kW	Loading kW	Cat. No.	Heater power kW	Loading kW	Cat. No.	Heater power kW	Loading kW
230 V; 50 Hz															
LAUDA Proline – single phase															
RP 845	LCK 1885	3.5	3.6	LCK 4885	1.75	1.8	LCK 5885	2.7	3.2	LCK 6885	1.3	1.6	LCK 8885	2.9	3.6
RP 855	LCK 1893	3.5	3.6	–	–	–	LCK 5893	2.7	3.2	–	–	–	LCK 8893	2.9	3.6
RP 870	LCK 1895	3.5	3.6	–	–	–	LCK 5895	2.7	3.2	–	–	–	LCK 8895	2.9	3.6
RP 890	LCK 1897	3.5	3.6	–	–	–	LCK 5897	2.7	3.2	–	–	–	LCK 8897	2.9	3.6
RP 1290	LCK 1899	3.5	3.6	–	–	–	LCK 5899	2.7	3.2	–	–	–	LCK 8899	2.9	3.6
RP 1840	LCK 1887	3.5	3.6	LCK 4887	1.75	1.8	LCK 5887	2.7	3.2	LCK 6887	1.3	1.6	LCK 8887	2.9	3.6
RP 1845	LCK 1891	3.5	3.6	–	–	–	LCK 5891	2.7	3.2	–	–	–	LCK 8891	2.9	3.6
RP 3530	LCK 1889	3.5	3.6	LCK 4889	1.75	1.8	LCK 5889	2.7	3.2	LCK 6889	1.3	1.6	LCK 8889	2.9	3.6
RP 845 C	LCK 1886	3.5	3.6	LCK 4886	1.75	1.8	LCK 5886	2.7	3.2	LCK 6886	1.3	1.6	LCK 8886	2.9	3.6
RP 855 C	LCK 1894	3.5	3.6	–	–	–	LCK 5894	2.7	3.2	–	–	–	LCK 8894	2.9	3.6
RP 870 C	LCK 1896	3.5	3.6	–	–	–	LCK 5896	2.7	3.2	–	–	–	LCK 8896	2.9	3.6
RP 890 C	LCK 1898	3.5	3.6	–	–	–	LCK 5898	2.7	3.2	–	–	–	LCK 8898	2.9	3.6
RP 1290 C	LCK 1900	3.5	3.6	–	–	–	LCK 5900	2.7	3.2	–	–	–	LCK 8900	2.9	3.6
RP 1840 C	LCK 1888	3.5	3.6	LCK 4888	1.75	1.8	LCK 5888	2.7	3.2	LCK 6888	1.3	1.6	LCK 8888	2.9	3.6
RP 1845 C	LCK 1892	3.5	3.6	–	–	–	LCK 5892	2.7	3.2	–	–	–	LCK 8892	2.9	3.6
RP 3530 C	LCK 1890	3.5	3.6	LCK 4890	1.75	1.8	LCK 5890	2.7	3.2	LCK 6890	1.3	1.6	LCK 8890	2.9	3.6
400 V; 3/N/PE; 50 Hz															
LAUDA Proline Kryomats – three phase															
RP 3050 C	LUK 239	3.5	5.0	LUK 339	3.0	5.0	LUK 439	2.8	5.0						
RP 4050 C	LUK 241	3.5	5.0	LUK 341	3.0	5.0	LUK 441	2.8	5.0						
RP 3090 C	LUK 245	3.5	5.0	LUK 345	3.0	5.0	LUK 445	2.8	5.0						
RP 4090 C	LUK 247	3.5	5.0	LUK 347	3.0	5.0	LUK 447	2.8	5.0						
RP 3050 CW	LUK 240	3.5	5.0	LUK 340	3.0	5.0	LUK 440	2.8	5.0						
RP 4050 CW	LUK 242	3.5	5.0	LUK 342	3.0	5.0	LUK 442	2.8	5.0						
RP 3090 CW	LUK 246	3.5	5.0	LUK 346	3.0	5.0	LUK 446	2.8	5.0						
RP 4090 CW	LUK 248	3.5	5.0	LUK 348	3.0	5.0	LUK 448	2.8	5.0						
208 V; 3/PE; 60 Hz															
200 V; 3/PE; 50/60 Hz															
230 V; 50 Hz															
LAUDA Integral T – single phase															
T 1200	LWP 101	2.25	2.7	–	–	–	LWP 801	1.85	2.7	LWP 811	1.7	2.7	–	–	–
T 1200 W	LWP 102	2.25	2.7	–	–	–	LWP 802	1.85	2.7	–	–	–	–	–	–
T 2200	LWP 103	2.25	3.1	LWP 203	2.25	3.1	LWP 803	1.85	3.1	–	–	–	LWP 846	1.7	3.1
T 2200 W	LWP 104	2.25	3.1	LWP 204	2.25	3.1	LWP 804	1.85	3.1	–	–	–	–	–	–
230 V; 60 Hz															
208-230 V; 60 Hz															
200 V; 50 Hz															
200 V; 60 Hz															
400 V; 3/N/PE; 50 Hz															
LAUDA Integral T – three phase															
T 4600	LWP 205	6.0	8.5	LWP 305	4.9	8.5	LWP 505	6.0	8.5	–	–	–	–	–	–
T 4600 W	LWP 206	6.0	8.3	LWP 306	4.9	8.3	–	–	–	–	–	–	–	–	–
T 7000	LWP 207	6.0	11.5	–	–	–	LWP 507	6.0	8.3	LWP 607	5.3	11.5	–	–	–
T 7000 W	LWP 208	6.0	11.2	–	–	–	–	–	–	LWP 608	5.3	11.2	–	–	–
T 10000	LWP 209	9.0	16.0	–	–	–	–	–	–	LWP 609	7.95	15.0	–	–	–
T 10000 W	LWP 210	9.0	15.5	–	–	–	–	–	–	LWP 610	7.95	14.5	–	–	–
230 V; 50 Hz															
LAUDA Integral XT – single phase															
XT 150	LWP 112	3.5	3.68	LWP 512	2.65	3.2	LWP 812	2.9	3.5						
XT 250 W	LWP 113	3.5	3.68	LWP 513	2.65	3.2	LWP 813	2.9	3.5						
XT 350 W	LWP 117	3.5	3.68	LWP 517	2.65	3.2	LWP 817	2.9	3.5						
XT 350 HW	LWP 119	3.5	3.68	LWP 519	2.65	3.2	LWP 819	2.9	3.5						
200 V; 50/60 Hz															
208-220 V; 60 Hz															
400 V; 3/PE; 50 Hz															
440-480 V; 3/PE; 60 Hz															
400 V; 3/PE; 50 Hz & 440-480 V; 3/PE; 60 Hz															
LAUDA Integral XT – three phase															
XT 280	LWP 334	2.9	7.0	LWP 434	2.65	6.5	LWP 534	4.0	9.0	–	–	–	–	–	–
XT 550	LWP 324	5.7	7.6	LWP 424	5.3	6.9	LWP 524	5.3	7.8	–	–	–	–	–	–
XT 750	LWP 320	5.7	7.6	LWP 420	5.3	6.9	LWP 520	5.3	7.8	–	–	–	–	–	–
XT 750 H	LWP 322	5.7	7.6	LWP 422	5.3	6.9	LWP 522	5.3	7.8	–	–	–	–	–	–
XT 490 W	LWP 339	5.7	9.5	LWP 439	5.3	8.6	LWP 539	5.3	9.0	–	–	–	–	–	–
XT 550 W	LWP 325	5.7	7.6	LWP 425	5.3	6.9	LWP 525	5.3	7.8	–	–	–	–	–	–
XT 950 W	LWP 321	5.7	7.6	LWP 421	5.3	6.9	LWP 521	5.3	7.8	–	–	–	–	–	–
XT 1850 W	–	–	–	–	–	–	LWP 532	10.6	13.8	LWP 632	14.0	20.8	LWP 732	10.6 & 14.0	20.8
XT 1850 WS	–	–	–	–	–	–	LWP 533	16.0	17.3	–	–	–	–	–	–
XT 1590 W	–	–	–	–	–	–	LWP 542	8.0	13.8	LWP 642	7.0	16.6	LWP 742	5.3 & 7.0	16.6



Type	Cat. No.	Loading kW	Cat. No.	Loading kW	Cat. No.	Loading kW	Cat. No.	Loading kW	Cat. No.	Loading kW	Cat. No.	Loading kW	Cat. No.	Loading kW
230 V; 50/60 Hz			230 V; 50 Hz		230 V; 60 Hz		115 V; 60 Hz		100 V; 50 Hz/115 V; 60 Hz		220 V; 60 Hz		208-230 V; 60 Hz	
LAUDA WK class – single phase														
WK 300	-	-	LWM 117	0.35	-	-	-	-	LWM 717	0.4	-	-	-	-
WK 500	-	-	LWG 132	0.47	LWG 232	0.47	-	-	LWG 732	0.6	-	-	-	-
WK 502	-	-	LWG 140	0.9	LWG 240	1.0	-	-	-	-	-	-	-	-
WK 1200	-	-	LWG 133	1.2	LWG 233	1.2	-	-	LWG 733	1.4	-	-	-	-
WK 1200 W	-	-	LWG 161	1.2	LWG 261	1.2	-	-	LWG 761	1.2	-	-	-	-
WK 1400	-	-	LWG 137	1.0	LWG 237	1.0	-	-	LWG 737	1.0	-	-	-	-
WK 1400 W	-	-	LWG 162	1.0	-	-	-	-	LWG 762	1.0	-	-	-	-
WK 2200	-	-	LWG 134	1.6	LWG 234	1.6	-	-	-	-	-	-	LWG 834	1.6
WK 2200 W	-	-	LWG 163	1.6	LWG 263	1.6	-	-	-	-	-	-	LWG 863	1.6
WK 2400	-	-	LWG 138	1.4	LWG 238	1.4	-	-	-	-	-	-	-	-
WK 2400 W	-	-	LWG 164	1.4	-	-	-	-	-	-	-	-	-	-
WKL 230	LWM 016	0.3	-	-	-	-	-	-	LWM 716	0.5	-	-	-	-
WKL 600	-	-	LWG 141	0.7	LWG 241	0.7	-	-	LWG 741	0.83	-	-	-	-
WKL 603	-	-	LWG 142	0.9	LWG 242	0.9	-	-	-	-	-	-	-	-
WKL 900	-	-	LWG 159	0.8	-	-	-	-	-	-	-	-	LWG 859	0.8
WKL 903	-	-	LWG 160	1.0	-	-	-	-	-	-	-	-	-	-
WKL 1000	-	-	LWG 173	1.1	LWG 273	1.1	LWG 473	1.0	-	-	-	-	-	-
WKL 1200	-	-	LWG 153	1.6	-	-	-	-	-	-	-	-	LWG 853	1.6
WKL 1200 W	-	-	LWG 166	1.6	-	-	-	-	-	-	-	-	LWG 866	1.6
WKL 2200	-	-	LWG 154	2.2	-	-	-	-	-	-	-	-	LWG 854	2.2
WKL 2200 W	-	-	LWG 167	2.2	-	-	-	-	-	-	-	-	LWG 867	2.2
WK 3200	-	-	LWG 139	3.0	-	-	-	-	-	-	LWG 839	3.0	-	-
WKL 3200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
230 V; 3/PE; 50 Hz			230V; 3/PE; 60 Hz		400 V; 3/N/PE; 50 Hz		208 V; 3/PE; 60 Hz		440-480 V; 3/PE; 60 Hz		200 V; 3/PE; 60 Hz		208-230 V; 3/PE; 60 Hz	
LAUDA WK class – three phase														
WK 3200	LWG 035	2.0	-	-	LWG 235	2.0	-	-	-	-	-	-	-	-
WK 3200 W	-	-	-	-	LWG 265	2.0	LWG 765	2.0	-	-	-	-	-	-
WK 4600	-	-	-	-	LWG 236	2.5	-	-	LWG 636	2.5	-	-	LWG 336	2.5
WK 4600 W	-	-	-	-	LWG 258	2.3	-	-	-	-	-	-	LWG 758	2.3
WK 7000	-	-	LWG 145	5.5	LWG 245	5.0	LWG 345	5.0	LWG 645	5.0	LWG 745	5.0	-	-
WK 7000 W	-	-	-	-	LWG 247	4.7	LWG 347	4.8	-	-	LWG 770	5.0	-	-
WK 10000	-	-	-	-	LWG 249	6.5	LWG 349	7.0	LWG 649	7.0	LWG 749	7.0	-	-
WK 10000 W	-	-	-	-	LWG 251	6.0	LWG 351	6.0	LWG 651	6.0	LWG 751	6.0	-	-
WKL 3200	-	-	-	-	LWG 255	2.8	LWG 755	3.5	LWG 655	2.8	-	-	-	-
WKL 3200 W	-	-	-	-	LWG 268	2.8	-	-	-	-	-	-	LWG 768	2.8
WKL 4600	-	-	-	-	LWG 256	3.5	-	-	-	-	-	-	LWG 756	3.5
WKL 4600 W	-	-	-	-	LWG 257	3.3	-	-	-	-	-	-	LWG 757	3.3
WKL 7000	-	-	-	-	LWG 246	5.5	LWG 346	5.5	LWG 646	5.5	-	-	-	-
WKL 7000 W	-	-	-	-	LWG 248	5.2	-	-	LWG 648	5.2	-	-	-	-
WKL 10000	-	-	-	-	LWG 250	7.0	LWG 350	7.0	LWG 650	7.0	LWG 750	7.0	-	-
WKL 10000 W	LWG 052	6.5	-	-	LWG 252	6.5	LWG 352	7.0	LWG 652	6.5	-	-	-	-

LAUDA Glossary

Device functions

EasyUse operation (Proline)

Drain taps, castors and handles for increased mobility, double pump connections for the parallel connection of two external systems, switching of the circulation (bypass), removable Command remote control, and quick change of the required interfaces.

External control

The temperature of the thermostat is controlled via a temperature probe connected to the external system. The set value is compared with the actual value in the external system and readjusted within the thermostat. Depending on the operating temperature, insulation losses and exothermia, the bath temperature can be considerably above or below the set value. External control ensures that the bath temperature and application temperature are constant.

PowerAdapt System (Proline)

The maximum possible heating capacity is used as far as is permitted by the net. Advantage: up to 3.5 kW heating capacity even with cooling thermostats, shorter heating times and no overloading of the net. The patented LAUDA heater control minimises the loading effects on the laboratory's voltage network. Moreover, the maximum power consumption can be reduced to 10 A as required.

Proportional cooling (Kryomats, Process thermostats)

The cooling capacity is quasi-proportionally set according to the controller signal. This produces savings of around 75 percent compared to standard cooling that uses cooling and counter-cooling. The automatic cooling capacity adjustment also switches the cooling unit off completely should no cooling be required for a longer period of time.

SelfCheck Assistant (Proline, Integral XT)

The SelfCheck Assistant checks all parameters before the actual start of operations and the switch-off methods of the heater control in particular. The system registers not only alarm or error messages on the display; it also points out scheduled maintenance tasks such as cleaning of the cooling grid.

SmartCool System (Proline)

A special form of proportional cooling combined with a regulated ventilator.

Types of device

Bath/circulation thermostat

Is a bath thermostat with a circulating pump for closed or open external circuits.

Bath thermostat

Is a thermostat which is equipped with a bath capable of holding the object to be thermostated. The built-in circulation pump is used to mix the bath liquid, but can also be used to convey the liquid through a closed external circuit, e.g. the connection of through-flow coolers, if required.

Calibration thermostat

Is a bath thermostat with especially high temperature stability and especially consistent spatial temperature distribution. It is used mainly for the calibration and adjustment of test pieces in the bath.

Circulation chiller (also circulating chiller)

Are special cooling thermostats designed as circulation thermostats without a freely-accessible bath. Thanks to their construction, they are independent devices which are frequently used as a replacement for the cooling with mains water.

Circulation heat exchanger

Is an add-on cooler which, via a heat exchanger, uses an existing primary cooling circuit to cool various external systems.

Circulation thermostat

Is a thermostat through which the bath liquid is conveyed through an open or closed external circuit.

Clear-view thermostat

Is a bath thermostat with transparent front and back to enable viewing of an object to be thermostated, usually a viscometer. Bath thermostats with transparent polycarbonate baths are known as thermostats with transparent bath.

Cooling thermostat

Is a thermostat whose working temperature range is below the ambient temperature.

Heating and cooling thermostat

Is a thermostat whose working temperature range is above and below the ambient temperature and which can both heat and cool.

Heating thermostat

Is a thermostat whose working temperature range is above the ambient temperature and which can only heat.

Immersion thermostat

Is a thermostat which can be combined with any bath. It is attached to the side of the bath or on a stand by means of a screw clamp.

Immersion cooler

Is an add-on cooler which is connected by means of a flexible tube to a cooling coil for immersion in any bath or vessel.

Kryomat

Is a floor-mounted heating and cooling thermostat in three different levels with various cooling and pump capacities.

Process thermostats (Integral T, Integral XT)

Are circulation thermostats used as heating and cooling thermostats with high cooling, heating and pump capacities. Small volumes of liquid enable quick cooling-down and heating speeds: they are ideal for process technology applications.

Through-flow cooler

Is an add-on cooler which can be interconnected in an external circuit and which extends the function of a heating thermostat to that of a heating and cooling thermostat. It replaces water cooling or can be used to achieve lower temperatures (down to -40 °C with the DLK 45/DLK 45 LiBus).

Ultra thermostats

Are heating thermostats used as bath/circulation thermostats or as pure circulation thermostats with spatially-separated bath and control unit. This enables remote control and monitoring.

Water bath

Is a heating bath which does not have a pump for active mixing purposes and which is only equipped for use with water.

Refrigeration technology

Cooling capacity

Is the effective capacity available in a cooling thermostat or circulation chiller. Losses caused by the circulating pump and invasive heat have already been deducted.

Cooling cascades

If temperatures below -50 °C are to be produced with compressor cooling units, two-stage cooling units connected in cascades are required to bridge the difference between the cold side (evaporation pressure) and warm side (condensation pressure, e.g. ambient temperature). The high-pressure stage bridges the temperature difference from approx. ambient temperature to -40 °C, for example. The low-temperature stage provides the final temperature of -90 °C, for example.

Refrigerant

Is used in the circuit of the cooling unit and extracts the heat of the thermostating liquid when the compressed gas expands and evaporates in the evaporator. LAUDA only uses refrigerants with ODP = 0 which do not destroy the ozone layer (ODP = ozone depleting potential). In several LAUDA thermostats natural refrigerants are used. Natural refrigerants are naturally occurring, non-synthetic substances. In addition to a ODP of zero they also have a very low GWP (global warming potential).

Pumps

Pressure pump

Is used for the circulation of the bath liquid in a closed external circuit and for mixing the liquid within the bath.

Vario pump (ECO, Integral XT)

Is a pressure pump which can be set to various output stages with regard to flow rate and flow pressure. This enables the optimum adaptation to the corresponding application.

Varioflex pump (Proline)

Is a pressure/suction pump with 8 different pump capacity settings to be connected to open and closed circuits. Its low energy input makes working at the lowest temperatures possible. The Varioflex pump is available in a high-power model as a pure pressure pump for devices with deeper baths. The patented low-level protection (DGM) is an additional safety advantage.

Technical data of LAUDA devices

ACC range (Active Cooling Control): according to DIN 12876

This is the working temperature range during operation with an active cooling unit. The working temperature range is equal to the ACC range in all LAUDA devices.

Ambient temperature range

This is the permissible temperature range of the environment in which the device works properly. It is 5...35 °C for all LAUDA devices contained within this brochure with the exception of the ECO, Integral and the WK devices, where the latter is extended to 40 °C. This is particularly important with respect to industrial applications.

Bath depth

Is the overall dimension from the upper edge to the bottom of the bath.

Bath opening

Is the usable surface available for direct thermostating, as a rule over the entire usable depth.

Bath volume (also filling volume)

Is the volume of the bath liquid that is required for the appropriate operation of the thermostat in the bath. The required minimum volume and the permitted maximum volume are usually given. The difference is the expansion volume, which must absorb the heat expansion of the bath liquid. The expansion volume is especially large with process thermostats.

Discharge pressure

Is the pressure of the circulation pump of a thermostat directly at the pressure nozzle, measured with water. In the tables, the maximum discharge pressure is given at flow rate zero. The diagrams illustrate the discharge pressure is dependent upon the flow rate.

Discharge suction

This is the suction of the circulation pump (Varioflex or Duplex pump) directly at the suction nozzle, measured with water. In the tables, the maximum suction is given at flow rate zero. The diagrams illustrate the discharge suction is dependent upon the flow rate.

Display resolution

Is given with regard to the digital temperature display of the actual value, and displays the temperature difference between two subsequent numbers.

Flow rate

Is the volume of liquid conveyed per time unit by the circulation pump, measured with water. In the tables, the maximum flow rate is given at counter pressure zero. The diagrams illustrate the discharge pressure is dependent upon the flow rate.

Heating capacity

This is the maximum electrical capacity of the installed heater at the given nominal voltage. The heating capacity of LAUDA thermostats may be controlled if required.

Interface, analogue

Is used to input the set value of the temperature/to output temperature values or other values in analogue form, usually as a reference signal with voltage (0...10 V) or current (0/4...20 mA). Relevant LAUDA interfaces are adjustable and scalable.

Interface, digital

Is used to exchange digital data, mainly set and actual temperature values. The RS 232 interface is of a serial type and allows a point-to-point connection. This means that only two participants can communicate at a time with each other via the interface. The RS 485 interface is an addressable interface to which up to 32 participants with their own address may be connected.

International protection, IP

As per EN 60529. The first digit indicates the protection against contact and foreign objects, whereas the second digit indicates protection against water. For example, IP 32: 3 stands for protection against contact with dangerous parts located inside with a tool of greater than/equal to 2.5 mm diameter and up to 100 mm in length. 2 stands for protection against dripping water at angles of 15 °. The assessment is carried out as per EN 61010-1. The LAUDA range only provides IP information for process thermostats and circulation chillers.

Intrinsic temperature

Is the operating temperature of a heating thermostat attained when the thermostat is switched off. It depends on the pump capacity, the heat transfer liquid used and the insulation of the thermostats. The working temperature range only starts approx. 3 °C above the intrinsic temperature.

Operating temperature range

This is the temperature range defined by the lowest and highest permissible operating temperature. As a rule, this is only given for heating thermostats whose working temperature range can be extended to lower temperatures by means of auxiliary equipment.

Profibus

Is a bus system with a high signal transfer rate for connecting up to 256 devices and is used mainly in the chemical industry.

Resolution setting

Is the difference between two consecutive set values of a digital set value setting.

Safety classes

It is possible to use non-flammable or flammable bath liquids in thermostats. The relevant safety-related requirements are stipulated in DIN EN 61010-2-010. According to DIN 12876-1, we make a distinction between class I with the distinction NFL (non-flammable) with built-in overtemperature protection exclusively for non-flammable liquids, and class III with the distinction FL (flammable) with adjustable overtemperature protection and low level protection for flammable liquids.

Sound pressure level

Is measured according to the guidelines given in DIN EN ISO 11200 and the basic standards contained therein.

Standards

The safety regulations for electric laboratory equipment are stipulated in the European standards EN 61010-1 and EN 61010-2010. The terms and the stipulation of the characteristic data are described in DIN 12876. EMC requirements are stipulated in EN 61356. Depending on the device, further standards may be applied.

Temperature stability

This is half of the temperature difference between the highest and the lowest temperatures which are measured at a specific set value after attaining a stable value for 30 minutes in a thermostat. The details are provided at 70 °C (using water) for a heating thermostat and at -10 °C (using ethanol) for a cooling thermostat.

Usable depth

Is the maximum liquid depth available in the bath thermostat for direct thermostating.

Working temperature range

This is the temperature range which can be attained at an ambient temperature of 20 °C by the thermostat alone and with the exclusive use of electrical energy and without any other aid. The working temperature range of a heating thermostat begins above the ambient temperature and ends at the upper limit of the operating temperature.