

## Description

Series ACL, ACLD and ACLDR pumps are horizontal, self-priming segmental-type side-channel pumps. They are manufactured single and multiple staged.

In type ACL, the shaft runs on the drive side in an external roller bearing and on the cover side in a plain bearing that is lubricated by the pumping material; in types ACLD and ACLDR, in two external roller bearings.

The shafts are sealed by single-acting mechanical shaft seals.

After being filled one time with the carrier fluid, these pumps draw by themselves. They are capable of conveying air at the same time and reliably draw even under unfavourable suction conditions, e.g. over a "mountain".

The pumping material should not contain rough or strongly abrasive impurities.

Due to the strong dependence, especially of the lifting height and the input power on the speed, please check

with us if any changes are made. Another direction of rotation is feasible.

The power requirements of side-channel pumps increase with increasing lifting heights. Consequently, the pump must not exceed the lifting height specified for the electric motor design.

The performance data are based on conveying pure water with specific weight = 1 and a viscosity of 1 mm<sup>2</sup>/s (cSt) at 20 °C. Performance tolerance ± 10 %.

When conveying fluids with a specific weight other than 1.0, the power requirement changes corresponding to the specific weight.

The pumps are suitable e.g., for waterworks, water supply plants, pressure booster stations, as boiler feeds and as condensate pumps. They are also used where normal centrifugal pumps fail due to gas occlusions and gas inrushes.

## General Characteristics

<b>Suitable fluids</b>	Water, coolant emulsions, low-viscosity oils, fuels, acids, lyes and similar media	<b>Direction of rotation</b>	right (viewed from the shaft end) left-hand rotation in special design
<b>Medium temperature</b>	-20 ° tp +140 °C	<b>Connections</b>	Page 4
<b>Discharge flow</b>	... 600 l/min	<b>Version A</b>	Pump with free shaft end
<b>Lifting height</b>	... 229 m	<b>AK</b>	Pump with coupling
<b>Viscosity</b>	230 mm <sup>2</sup> /s (cSt)	<b>D</b>	Pump with coupling and base plate, without electric motor
<b>Suction lift</b>	... 8.5 m (H <sub>geod.</sub> +H <sub>v</sub> )	<b>DM</b>	Pump with electric motor, coupling and protection guard for coupling mounted on a mutual base plate
<b>Speed</b>	1450 rpm at 50 Hz 1750 rpm at 60 Hz		

## Materials

	1	2	3	4
Housing	GG	GG	G-SnBz 10	1.4581
Impeller	CuZnAl 1	1.4059	1.4059	1.4581
Shaft	1.4021	1.4021	1.4571	1.4571
Plain bearing bush	Coal	Coal	Coal	Coal
Gasket ring	Thermoflon K	Thermoflon K	Thermoflon K	Thermoflon K

## Mechanical shaft seal materials

	Carbon	Carbon	Silicon carbide
Slip ring			
Stationary seal ring	1.4122	Al-oxide	Carbon
Auxiliary seal	Teflon	Teflon	Teflon

## Explanations on material numbers

(Material no. Designation according to DIN 17006)

GG	Cast iron with a tensile strength of at least 220 N/mm <sup>2</sup>
1.4021	X 20 Cr 13
1.4059	G - X 22 Cr Ni 17
1.4571	X 10 Cr Ni Mo Ti 18 10
1.4581	G - X 7 Cr Ni Mo Nb 18 10

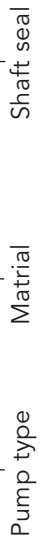
	Stage number 1				Stage number 2				Stage number 3				Stage number 4				Stage number 5				Stage number 6					
	Lifting height H m	Discharge flow Q l/min	Power requirement P kW	Intended motor kW n=1450	Lifting height H m	Discharge flow Q l/min	Power requirement P kW	Intended motor kW n=1450	Lifting height H m	Discharge flow Q l/min	Power requirement P kW	Intended motor kW n=1450	Lifting height H m	Discharge flow Q l/min	Power requirement P kW	Intended motor kW n=1450	Lifting height H m	Discharge flow Q l/min	Power requirement P kW	Intended motor kW n=1450	Lifting height H m	Discharge flow Q l/min	Power requirement P kW	Intended motor kW n=1450		
ACL ACLD 23 ACLDR	5	35	0.15	0.19	0.25	0.25	30	25	0.50	0.70	0.75	1.1	49	51	30	25	0.7	0.9	1.1	1.1						
	13	14	0.17	0.22	0.25	0.37	26	27	0.40	0.50	0.55	0.75	59	53	25	20	0.40	0.50	0.55	0.75						
	20	19	0.20	0.26	0.25	0.37	40	36	0.45	0.60	0.55	0.75	77	70	20	15	0.45	0.60	0.55	0.75						
	26	24	0.22	0.29	0.37	0.55	52	46	0.50	0.65	0.75	1.1	99	89	15	10	0.50	0.65	0.75	1.1						
	31	29	0.25	0.33	0.37	0.55	62	54	0.55	0.75	1.1	1.5	117	105	10	5	0.60	0.7	0.75	1.1						
	36	31	0.30	0.36	0.37	0.55	71	61	0.60	0.7	0.75	1.1	103	90	10	5	0.60	0.7	0.75	1.1						
ACL ACLD 33 ACLDR	11	9	0.25	0.25	0.37	0.37	39	38	0.40	0.40	1.1	1.1	57	56	40	40	1.4	1.5	2.2	2.2						
	16	14	0.35	0.30	0.55	0.55	50	48	0.45	0.55	1.1	1.1	72	71	35	35	1.6	1.9	2.2	2.2						
	23	19	0.40	0.40	0.55	0.55	50	48	0.45	0.55	1.1	1.1	72	71	35	35	1.6	1.9	2.2	2.2						
	28	25	0.45	0.45	0.55	0.55	50	48	0.45	0.55	1.1	1.1	72	71	35	35	1.6	1.9	2.2	2.2						
	32	30	0.50	0.55	0.75	0.75	59	58	0.50	0.55	1.1	1.5	87	86	30	30	1.9	2.1	2.2	3						
	37	35	0.55	0.60	0.75	0.75	70	67	0.55	0.60	0.75	1.5	103	98	25	25	2.1	2.4	3.0	3						
ACL ACLD 33 S ACLDR	42	38	0.60	0.65	0.75	1.1	79	74	0.60	0.65	0.75	1.1	116	108	20	20	1.8	2.0	2.2	3						
	12	80	0.45	0.55	0.75	0.75	33	33	0.45	0.50	0.55	0.75	51	51	60	60	1.7	2.1	2.2	2.2						
	10	18	0.50	0.50	0.55	0.75	44	44	0.50	0.50	0.55	0.75	65	65	70	50	1.7	2.1	2.2	2.2						
	15	23	0.60	0.60	0.75	0.75	51	59	0.60	0.60	0.75	1.1	86	86	60	45	1.9	2.2	2.2	3						
	21	29	0.65	0.70	0.75	1.1	61	64	0.65	0.70	0.75	1.1	98	96	50	40	2.1	2.4	3.0	3						
	27	31	0.70	0.80	1.1	1.1	66	69	0.70	0.80	1.1	1.1	106	104	45	35	2.6	3.0	3.0	3						
ACL ACLD 43 ACLDR	34	36	0.75	0.85	1.1	1.1	72	74	0.75	0.90	1.1	1.1	114	111	40	30	2.3	2.7	3.0	4						
	37	38	0.75	0.90	1.1	1.1	77	79	0.75	0.90	1.1	1.1	114	111	35	25	1.5	1.5	1.5	1.5						
	40	41	0.80	1.00	1.1	1.1	77	79	0.80	1.00	1.1	1.1	114	111	35	25	1.5	1.5	1.5	1.5						
	5	125	0.5	0.75	0.75	0.75	26	26	0.5	0.50	0.55	0.75	39	39	110	110	1.9	1.9	1.9	1.9						
	7	13	0.6	0.6	0.75	0.75	28	34	0.6	0.6	0.75	0.75	40	51	110	100	2.1	2.2	2.2	3						
	15	17	0.7	0.7	1.1	1.1	36	42	0.7	0.7	1.1	1.1	52	63	100	90	3.1	3.2	4	4						
ACLDR 53	24	25	0.8	0.8	1.1	1.1	45	49	0.8	0.8	1.1	1.1	66	73	80	80	3.5	3.5	4	4						
	27	29	0.9	0.9	1.1	1.1	53	56	0.9	0.9	1.1	1.1	78	83	80	70	3.9	3.9	5.5	5.5						
	32	32	1.0	1.0	1.1	1.1	62	63	1.0	1.0	1.1	1.1	92	94	70	60	4.3	4.2	5.5	5.5						
	36	36	1.1	1.1	1.5	1.5	62	63	1.1	1.1	1.5	1.5	105	104	60	50	3.5	3.5	4	4						
	38	36	1.2	1.2	1.5	1.5	71	70	1.2	1.2	1.5	1.5	105	104	60	50	3.5	3.5	4	4						
	8	200	1.1	1.5	1.5	1.5	28	28	1.1	1.1	1.5	1.5	42	42	175	175	3.7	3.7	5.5	5.5						
ACLDR 53 S	9	15	1.1	1.3	1.5	1.5	28	28	1.1	1.1	1.5	1.5	44	62	175	150	3.7	4.3	5.5	5.5						
	15	22	1.2	1.5	1.5	2.2	29	42	1.2	1.2	1.5	1.5	65	81	150	125	4.3	4.9	5.5	5.5						
	22	28	1.4	1.7	2.2	2.2	44	55	1.4	1.4	1.7	2.2	86	108	150	125	5.8	6.5	7.5	7.5						
	30	32	1.5	1.8	2.2	2.2	58	63	1.5	1.5	1.8	2.2	114	123	125	110	6.8	7.0	7.5	7.5						
	36	35	1.9	1.9	2.2	2.2	68	68	1.9	1.9	2.2	2.2	100	101	110	100	5.6	5.5	7.5	7.5						
	8	7	350	350	1.7	2.5	2.2	3	31	29	4.2	5.6	5.5	7.5	46	42	300	300	6.3	8.4	7.5	11				
ACLDR 53 S	16	15	300	300	2.1	2.8	3	4	47	44	250	250	5.3	6.4	7.5	7.5	70	66	250	250	7.9	9.6	11	15		
	25	23	250	250	2.7	3.2	4	4	65	60	200	200	6.7	7.0	7.5	11	96	89	200	200	10.5	15	15	15		
	34	31	200	200	3.4	3.5	4	4	175	175	175	175	7.5	7.4	11	112	121	175	175	11.2	11.1	15	15			
	40	35	175	175	3.8	3.7	5.5	5.5	13	13	600	59	7.5	11	37	19	550	500	9.8	12.0	11	15				
	7	7	550	500	3.3	4.0	4	5.5	25	13	550	500	6.6	8.0	7.5	11	53	46	500	450	11.2	14.4	15	18.5		
	13	16	500	450	3.8	4.8	5.5	5.5	36	32	450	400	6.5	11.6	11	15	69	68	450	400	12.7	16.5	15	18.5		
ACLDR 63	24	24	450	400	4.3	5.5	5.5	7.5	46	47	400	350	8.5	11.6	11	15	82	84	400	350	14.2	17.4	18.5	22		
	28	30	400	350	4.7	5.8	5.5	7.5	55	58	350	300	10.6	12.0	15	15	94	93	350	300	15.8	18.0	18.5	22		
	32	33	350	300	5.2	6.0	7.5	7.5	63	64	350	300	10.6	12.0	15	15	94	93	350	300	15.8	18.0	18.5	22		
	8	7	600	300	3.0	4	4	5.5	25	13	550	500	6.6	8.0	7.5	11	53	46	500	450	11.2	14.4	15	18.5		
	13	16	500	450	3.8	4.8	5.5	5.5	36	32	450	400	6.5	11.6	11	15	69	68	450	400	12.7	16.5	15	18.5		
	24	24	450	400	4.3	5.5	5.5	7.5	46	47	400	350	8.5	11.6	11	15	82	84	400	350	14.2	17.4	18.5	22		

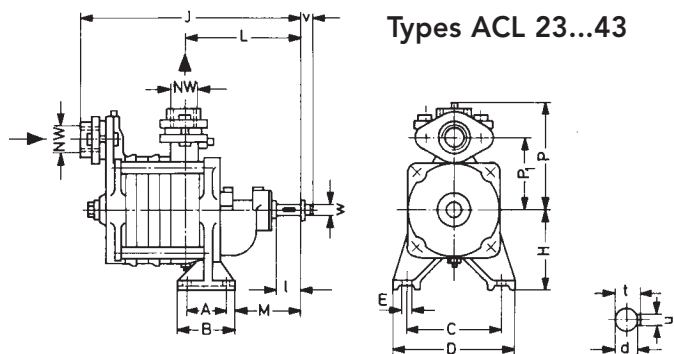
Pump mounting types ACL and ACLD are only possible above the stepped line.

Data on the left side of the column = Pumps in standard, iron or bronze material versions

Data on the right side of the column = Pumps in stainless steel material version

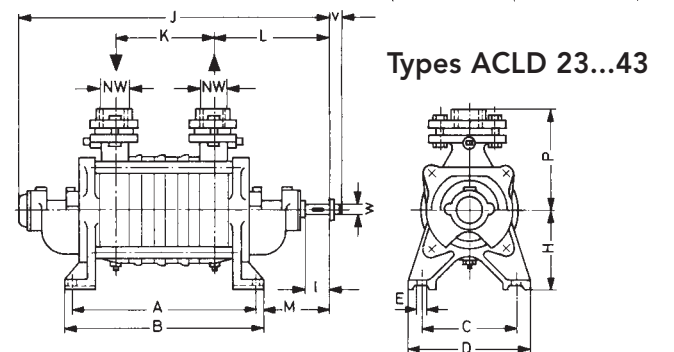
Ordering example: ACLDR 33/4 - 1 U (Version: DM with 3 kW DS motor, 220/380 V, 50 Hz, 1450 rpm, IP 44)



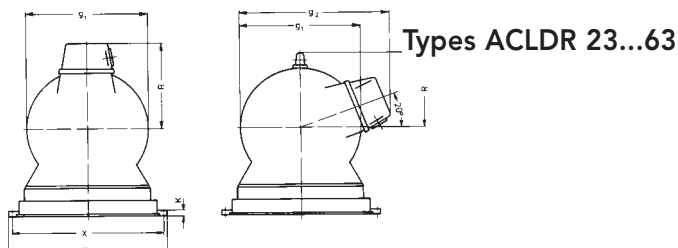


**Types ACL 23...43**

Type ACL and ACLD oval flange ND 16  
 Type ACLDR  
 Round flange according to DIN 2502 ND 25  
 Counter flange according to DIN 2655 ND 25  
 (Counter flange can be supplied for the ACLDR version on request)



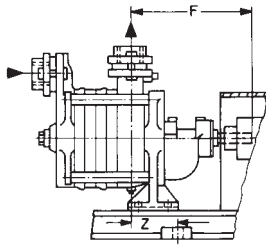
**Types ACLD 23...43**



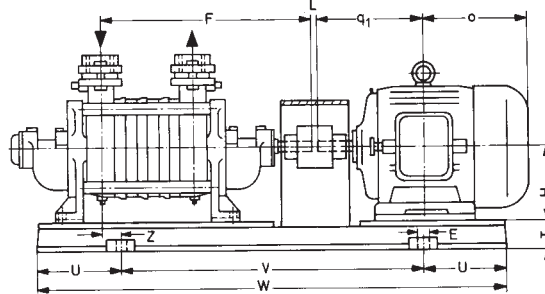
**Types ACLDR 23...63**

Type	Stage number	Suction and pressure flange					A	B	C	D	φ E	H	J		K	L	M	P		P <sub>1</sub>	Shaft end					ca. wt. kg											
		RW	External dia.	Bore dia.	Number of bores	Bore-φ							ACL	ACLD				ACL	ACLD		ACL	ACLD	ACL	ACLD	ACL	ACLD	ACL	ACLD	φ d	h <sub>6</sub>	l	t	u	V	W	ACL	ACLD
ACL ACLD	1	R 1"	-	-	-	-	161	185	110	140	11,5	90	229	296	70	125	67	120	112	75	14	30	16	5	10	M12x1,5	10	11									
	2						56	193	80				217	110													262	328	102	11	12						
	3						225	250	115				294	364													135	12	13								
ACLDR	4	25	115	85	4	14	258	282	110	140	11,5	90	393	167	125	67	90	-	14	30	16	5	10	M12x1,5	16												
ACL ACLD	1	R 1"	-	-	-	-	60	193	90	155	190	14	280	362	81	151	80	150	134	100	16	30	18	5	10	M14x1,5	17	18									
	2						230	260	155				190	14													317	399	118	151	80	30	18	5	10	19	20
	3						267	297	155				190	14													361	443	155	158	87	37	18	5	10	21	22
ACLDR	4	32	140	100	4	18	304	334	155	190	14	112	480	192	160	89	110	-	19	37	21,4	6	13	M16x1,5	29												
	5						341	371					155	190											14	517	229	160	89	110	37	21,4	6	13	32	35	
	6						378	408					155	190											14	554	266	160	89	110	37	21,4	6	13	35		
ACL ACLD	1	R 1 1/4"	-	-	-	-	60	193	90	155	190	14	284	362	81	151	80	150	138	100	16	30	18	5	10	M14x1,5	17	18									
	2						230	260	155				190	14													321	399	118	151	80	30	18	5	10	19	20
	3						267	297	155				190	14													365	443	155	158	87	37	18	5	10	21	22
ACLDR	4	32	140	100	4	18	304	334	155	190	14	112	480	192	160	89	110	-	19	37	21,4	6	13	M16x1,5	29												
	5						341	371					155	190											14	517	229	160	89	110	37	21,4	6	13	32	35	
	6						378	408					155	190											14	554	266	160	89	110	37	21,4	6	13	35		
ACL ACLD	1	R 1 1/2"	-	-	-	-	60	199	90	155	190	14	300	375	87	158	87	150	141	100	16	37	18	5	10	M14x1,5	17	18									
	2						242	272	155				190	14													343	418	130	158	87	37	18	5	10	19	20
	3						285	315	155				190	14													386	461	173	158	87	37	18	5	10	21	22
ACLDR	4	32	140	100	4	18	328	358	155	190	14	112	504	216	160	89	110	-	19	37	21,4	6	13	M16x1,5	30												
	5						371	401					155	190											14	547	259	160	89	110	37	21,4	6	13	33	36	
	6						414	444					155	190											14	590	302	160	89	110	37	21,4	6	13	36		
ACLDR	1	40	150	110	4	18	245	278	160	200	15	132	465	159	164	104	128	-	19	37	21,4	6	13	M16x1,5	28												
	2						297	331					159	211											37	21,4	6	13	37								
	3						350	383					159	211											37	21,4	6	13	42								
	4						402	436					159	211											37	21,4	6	13	46								
	5						455	488					159	211											37	21,4	6	13	51								
	6						507	540					159	211											37	21,4	6	13									
ACLDR	1	50	165	125	4	18	293	327	175	220	15	150	521	187	182	112	140	-	24	44	26,8	8	17	M22x2	36												
	2						369	403					187	211											44	26,8	8	17	44								
	3						446	480					187	211											44	26,8	8	17	52								
	4						522	556					187	211											44	26,8	8	17	60								
ACLDR	1	65	185	145	4	18	346	372	200	250	15	150	593	192	214	124	150	-	28	43	30,8	8	18	M24x2	52												
	2						437	463					192	283											43	30,8	8	18	64								
	3						528	554					192	283											43	30,8	8	18	76								

## Types ACL 23...43 DM version

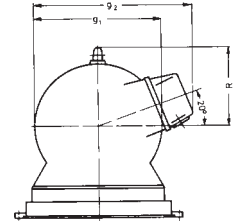
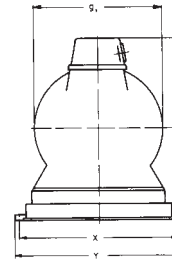


## Types ACLD 23...43 DM version



Frame sizes 71...80

Frame sizes 90...112

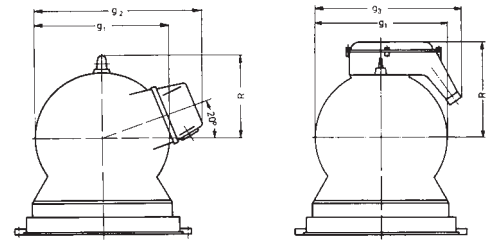
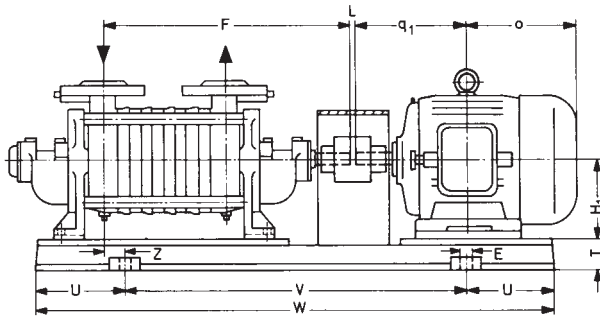


Pump dimensions page 4

Type	Stage number	n=1450 1/min	Motor frame size	Pump dimensions			Motor dimensions						Base plate dimensions										Base plate no.	Coupling size	ca. wt. kg
				F <sub>1</sub>	F <sub>2</sub>	L	g <sub>1</sub>	g <sub>2</sub>	g <sub>3</sub>	H <sub>1</sub>	o	q <sub>1</sub>	R	∅E	K	T	U	V	W	X	Y	Z			
ACL 23	1	0,25	71 s	135	—	2	137	—	—	90	104	98	113	12	13	30	60	285	405	220	245	0	159	S 1 - Z 39/14 - Z 20/14	24
		0,37	71	135	—	2	137	—	—	90	104	122	113	12	13	30	60	285	405	220	245	0	159	S 1 - Z 39/14 - Z 20/14	25,5
		0,55	80 s	135	—	2	154	—	—	90	117,5	121,5	124	12	13	30	60	285	405	220	245	12	159	S 1 - Z 39/14 - Z 20/19	27
	2	0,55	80 s	135	—	2	154	—	—	90	117,5	121,5	124	12	13	30	60	285	405	220	245	12	159	S 1 - Z 39/14 - Z 20/19	28
		0,75	80	135	—	2	154	—	—	90	126,5	128,5	124	12	13	30	60	285	405	220	245	12	159	S 1 - Z 39/14 - Z 20/19	29
		1,1	90 S	135	—	2	215	260	—	90	153,5	146,5	100	15	17	40	72,5	355	500	245	274	-14	179	S 1 - Z 39/14 - Z 20/24	44
	3	0,75	80	135	—	2	154	—	—	90	126,5	128,5	124	12	13	30	60	285	405	220	245	12	159	S 1 - Z 39/14 - Z 20/19	30
		1,1	90 S	135	—	2	215	260	—	90	153,5	146,5	100	15	17	40	72,5	355	500	245	274	-14	179	S 1 - Z 39/14 - Z 20/24	45,5
		1,5	90 L	135	—	2	215	260	—	90	179	146	100	15	17	40	72,5	355	500	245	274	-2	179	S 1 - Z 39/14 - Z 20/24	50
ACL 33 ACL 33 S	1	0,37	71	161	—	2	137	—	—	112	104	122	113	12	13	30	60	285	405	220	245	14	159	S 1 - Z 39/16 - Z 20/14	34
		0,55	80 s	161	—	2	154	—	—	112	117,5	121,5	124	12	13	30	60	285	405	220	245	27	159	S 1 - Z 39/16 - Z 20/19	35,5
		0,75	80	161	—	2	154	—	—	112	126,5	128,5	124	12	13	30	60	285	405	220	245	27	159	S 1 - Z 39/16 - Z 20/19	36
		1,1	90 S	161	—	2	215	260	—	112	153,5	146,5	100	15	17	40	72,5	355	500	245	274	0	179	S 1 - Z 39/16 - Z 20/24	51
	2	1,1	90 S	161	—	2	215	260	—	112	153,5	146,5	100	15	17	40	72,5	355	500	245	274	0	179	S 1 - Z 39/16 - Z 20/24	53
		1,5	90 L	161	—	2	215	260	—	112	179	146	100	15	17	40	72,5	355	500	245	274	12	179	S 1 - Z 39/16 - Z 20/24	58
		2,2	100 Ls	161	—	2	235	278	—	112	232	159	140	15	17	40	77,5	445	600	255	290	-16	180	S 2 - Z 39/16 - Z 30/28	71
		3	100 L	161	—	2	235	278	—	112	232	159	140	15	17	40	77,5	445	600	255	290	-16	180	S 2 - Z 39/16 - Z 30/28	74
	3	1,5	90 L	168	—	2	215	260	—	112	179	146	100	15	17	40	72,5	355	500	245	274	16	179	S 2a - Z 45/16 - Z 30/24	60
		2,2	100 Ls	168	—	2	235	278	—	112	232	159	140	15	17	40	77,5	445	600	255	290	-13	180	S 2a - Z 45/16 - Z 30/28	73
		3	100 L	168	—	2	235	278	—	112	232	159	140	15	17	40	77,5	445	600	255	290	-13	180	S 2a - Z 45/16 - Z 30/28	76
		4	112 M	168	—	2	255	322	—	112	246,5	164,5	154	15	22	45	90	550	730	305	345	-60	181	S 2a - Z 45/16 - Z 30/28	92,5
ACL 43	1	0,75	80	168	—	2	154	—	—	112	126,5	128,5	124	12	13	30	60	285	405	220	245	30	159	S 2a - Z 45/16 - Z 30/19	36,5
		1,1	90 S	168	—	2	215	260	—	112	153,5	146,5	100	15	17	40	72,5	355	500	245	274	3	179	S 2a - Z 45/16 - Z 30/24	52
		1,5	90 L	168	—	2	215	260	—	112	179	146	100	15	17	40	72,5	355	500	245	274	16	179	S 2a - Z 45/16 - Z 30/24	57
	2	1,5	90 L	168	—	2	215	260	—	112	179	146	100	15	17	40	72,5	355	500	245	274	16	179	S 2a - Z 45/16 - Z 30/24	59
		2,2	100 Ls	168	—	2	235	278	—	112	232	159	140	15	17	40	77,5	445	600	255	290	-13	180	S 2a - Z 45/16 - Z 30/28	71
		3	100 L	168	—	2	235	278	—	112	232	159	140	15	17	40	77,5	445	600	255	290	-13	180	S 2a - Z 45/16 - Z 30/28	74,5
	3	2,2	100 Ls	168	—	2	235	278	—	112	232	159	140	15	17	40	77,5	445	600	255	290	-13	180	S 2a - Z 45/16 - Z 30/28	74
		3	100 L	168	—	2	235	278	—	112	232	159	140	15	17	40	77,5	445	600	255	290	-13	180	S 2a - Z 45/16 - Z 30/28	77,5
		4	112 M	168	—	2	255	322	—	112	246,5	164,5	154	15	22	45	90	550	730	305	345	-60	181	S 2a - Z 45/16 - Z 30/28	93,5
ACLD 23	1	0,25	71 s	—	237	2	137	—	—	90	104	98	113	15	17	40	77,5	485	640	255	290	-82	180a	S 1 - Z 39/14 - Z 20/14	32
		0,37	71	—	237	2	137	—	—	90	104	122	113	15	17	40	77,5	485	640	255	290	-82	180a	S 1 - Z 39/14 - Z 20/14	33,5
		0,55	80 s	—	237	2	154	—	—	90	117,5	121,5	124	15	17	40	77,5	485	640	255	290	-70	180a	S 1 - Z 39/14 - Z 20/19	35
	2	0,55	80 s	—	237	2	154	—	—	90	117,5	121,5	124	15	17	40	77,5	485	640	255	290	-54	180a	S 1 - Z 39/14 - Z 20/19	37
		0,75	80	—	237	2	154	—	—	90	126,5	128,5	124	15	17	40	77,5	485	640	255	290	-54	180a	S 1 - Z 39/14 - Z 20/19	38
		1,1	90 S	—	237	2	215	260	—	90	153,5	146,5	100	15	17	40	77,5	445	600	255	290	-26	180	S 1 - Z 39/14 - Z 20/24	48
	3	0,75	80	—	237	2	154	—	—	90	126,5	128,5	124	15	17	40	77,5	485	640	255	290	-36	180a	S 1 - Z 39/14 - Z 20/19	38
		1,1	90 S	—	237	2	215	260	—	90	153,5	146,5	100	15	17	40	77,5	445	600	255	290	-9	180	S 1 - Z 39/14 - Z 20/24	49,5
		1,5	90 L	—	237	2	215	260	—	90	179	146	100	15	17	40	77,5	445	600	255	290	4	180	S 1 - Z 39/14 - Z 20/24	54,5
ACLD 33 ACLD 33 S	1	0,37	71	—	242	2	137	—	—	112	104	122	113	15	17	40	77,5	485	640	255	290	-71	180a	S 1 - Z 39/16 - Z 20/14	42
		0,55	80 s	—	242	2	154	—	—	112	117,5	121,5	124	15	17	40	77,5	485	640	255	290	-59	180a	S 1 - Z 39/16 - Z 20/19	43,5
		0,75	80	—	242	2	154	—	—	112	126,5	128,5	124	15	17	40	77,5	485	640	255	290	-59	180a	S 1 - Z 39/16 - Z 20/19	44,5
		1,1	90 S	—	242	2	215	260	—	112	153,5	146,5	100	15	17	40	77,5	445	600	255	290	-30	180	S 1 - Z 39/16 - Z 20/24	56
	2	1,1	90 S	—	242	2	215	260	—	112	179	146	100	15	17	40	77,5	445	600	255	290	-18	180	S 1 - Z 39/16 - Z 20/24	61
		1,5	90 L	—	279	2	215	260	—	112	153,5	146,5	100	15	17	40	77,5	445	600	255	290	-12	180	S 1 - Z 39/16 - Z 20/24	58
		1,5	90 L	—	279	2	215	260	—	112	179	146	100	15	22	45	90	550	730	305	345	-52	181	S 1 - Z 39/16 - Z 20/24	68
		2,2	100 Ls	—	279	2	235	278	—	112	232	159	140	15	22	45	90	550	730	305	345	-36	181	S 2 - Z 39/16 - Z 30/28	78
	3	1,5	90 L	—	323	2	215	260	—	112	179	146	100	15	22	45	90	550	730	305	345	-30	181	S 2a - Z 45/16 - Z 30/24	70
		2,2	100 Ls	—	323	2	235	278	—	112	232	159	140	15	22	45	90	550	730	305	345				

## Typ ACLDR 23...63 DM version

Frame sizes 71...80    Frame sizes 90...112



Pump dimensions page 4

Type	Stage number	n=1450 1/min kW	Motor frame size	Pump dimensions			Motor dimensions						Base plate dimensions										Base plate no.	Coupling size	ca. wt. kg
				F <sub>1</sub>	F <sub>2</sub>	L	g <sub>1</sub>	g <sub>2</sub>	g <sub>3</sub>	H <sub>1</sub>	o	q <sub>1</sub>	R	φE	K	T	U	V	W	X	Y	Z			
ACLD R 23	4	1,1	90 S	302	2	215	260	—	90	153,5	146,5	100	15	17	40	77,5	445	600	255	290	6	180	S 1 - Z 39/14 - Z 20/24	52,5	
		1,5	90 L	302	2	215	260	—	90	179	146	100	15	22	45	90	550	730	305	345	-33	181	S 1 - Z 39/14 - Z 20/24	62,5	
		2,2	100 Ls	302	2	235	278	—	100	232	159	140	15	22	45	90	550	730	305	345	-17	181	S 2 - Z 39/14 - Z 30/28	72,5	
ACLD R 33 ACLD R 33S	4	2,2	100 Ls	365	2	235	278	—	112	232	159	140	15	22	45	90	550	730	305	345	6	181	S 2b - Z 49/19 - Z 30/28	87	
		3	100 L	365	2	235	278	—	112	232	159	140	15	22	45	90	550	730	305	345	6	181	S 2b - Z 49/19 - Z 30/28	90	
		4	112 M	365	2	255	322	—	112	246,5	164,5	154	15	22	45	100	650	850	308	345	-38	182	S 2b - Z 49/19 - Z 30/28	104	
	5	5,5	132 S	365	2	300	363	—	132	259	213	174	15	22	45	100	650	850	308	345	-17	182	S 2b - Z 49/19 - Z 35/38	123	
		3	100 L	402	2	235	278	—	112	232	159	140	15	22	45	100	650	850	308	345	-26	182	S 2b - Z 49/19 - Z 30/28	96	
		4	112 M	402	2	255	322	—	112	246,5	164,5	154	15	22	45	100	650	850	308	345	-20	182	S 2b - Z 49/19 - Z 30/28	107	
	6	5,5	132 S	402	2	300	363	—	132	259	213	174	15	22	45	150	730	1030	385	430	-39	183	S 3a - Z 49/19 - Z 35/38	131	
		3	100 L	439	2	235	278	—	112	232	159	140	15	22	45	100	650	850	308	345	-8	182	S 2b - Z 49/19 - Z 30/28	99	
		4	112 M	439	2	255	322	—	112	246,5	164,5	154	15	22	45	100	650	850	308	345	-2	182	S 2b - Z 49/19 - Z 30/28	110	
ACLD R 43	4	3	100 L	389	2	235	278	—	112	232	159	140	15	22	45	100	650	850	308	345	-32	182	S 2b - Z 49/19 - Z 30/28	94	
		4	112 M	389	2	255	322	—	112	246,5	164,5	154	15	22	45	100	650	850	308	345	-26	182	S 2b - Z 49/19 - Z 30/28	105	
		5,5	132 S	389	2	300	363	—	132	259	213	174	18	26	48	150	730	1030	385	430	-45	183	S 3a - Z 49/19 - Z 35/38	130	
	5	5,5	132 S	432	2	300	363	—	132	259	213	174	18	26	48	150	730	1030	385	430	-24	183	S 3a - Z 49/19 - Z 35/38	133	
		7,5	132 M	432	2	300	363	—	132	297	213	174	18	26	48	150	730	1030	385	430	-5	183	S 3a - Z 49/19 - Z 35/38	146	
		5,5	132 S	475	2	300	363	—	132	259	213	174	18	26	48	150	730	1030	385	430	-2	183	S 3a - Z 49/19 - Z 35/38	136	
	6	7,5	132 M	475	2	300	363	—	132	297	213	174	18	26	48	150	730	1030	385	430	-17	183	S 3a - Z 49/19 - Z 35/38	149	
		1,5	90 L	336	2	215	260	—	132	179	146	100	15	22	45	90	550	730	305	345	-19	181	S 2b - Z 49/19 - Z 30/24	77	
		2,2	100 Ls	336	2	235	278	—	132	232	159	140	15	22	45	90	550	730	305	345	-3	181	S 2b - Z 49/19 - Z 30/28	86,5	
ACLD R 53	2	3	100 L	388	2	235	278	—	132	232	159	140	15	22	45	100	650	850	308	345	-27	182	S 2b - Z 49/19 - Z 30/28	98	
		4	112 M	388	2	255	322	—	132	246,5	164,5	154	15	22	45	100	650	850	308	345	-21	182	S 2b - Z 49/19 - Z 30/28	109	
		5,5	132 S	388	2	300	363	—	132	259	213	174	18	26	48	150	730	1030	385	430	-40	183	S 3a - Z 49/19 - Z 35/38	133	
	3	5,5	132 S	441	2	300	363	—	132	259	213	174	18	26	48	150	730	1030	385	430	-14	183	S 3a - Z 49/19 - Z 35/38	137	
		7,5	132 M	441	2	300	363	—	132	297	213	174	18	26	48	150	730	1030	385	430	6	183	S 3a - Z 49/19 - Z 35/38	149	
		5,5	132 S	493	2	300	363	—	132	259	213	174	18	26	48	150	730	1030	385	430	12	183	S 3a - Z 49/19 - Z 35/38	142	
	4	7,5	132 M	493	2	300	363	—	132	297	213	174	18	26	48	150	730	1030	385	430	31	183	S 3a - Z 49/19 - Z 35/38	155	
		11	160 M	493	3	320	—	—	160	344	241	243	20	30	55	150	930	1230	400	455	-24	184	S 4 - Z 49/19 - Z 40/42	218	
		7,5	132 M	546	2	300	363	—	132	297	213	174	18	26	48	150	730	1030	385	430	58	183	S 3a - Z 49/19 - Z 35/38	159	
5	11	160 M	546	3	320	—	—	160	344	241	243	20	30	55	150	930	1230	400	455	3	184	S 4 - Z 49/19 - Z 40/42	222		
	11	160 M	598	3	320	—	—	160	344	241	243	20	30	55	150	930	1230	400	455	28	184	S 4 - Z 49/19 - Z 40/42	227		
	15	180 M	598	3	320	—	—	160	394	241	243	20	30	55	150	930	1230	400	455	50	184	S 5 - Z 49/19 - Z 40/42	248		
ACLD R 53S	1	2,2	100 Ls	386	2	235	278	—	150	232	159	140	15	22	45	100	650	850	308	345	-35	182	S 3b - Z 60/24 - Z 35/38	100	
		3	100 L	386	2	235	278	—	150	232	159	140	15	22	45	100	650	850	308	345	-35	182	S 3b - Z 60/24 - Z 35/38	103	
		4	112 M	386	2	255	322	—	150	246,5	164,5	154	15	22	45	100	650	850	308	345	-30	182	S 3b - Z 60/24 - Z 35/38	114	
	2	5,5	132 S	386	2	300	363	—	150	259	213	174	18	26	48	150	730	1030	385	430	-48	183	S 3b - Z 60/24 - Z 35/38	137	
		7,5	132 M	462	2	300	363	—	150	259	213	174	18	26	48	150	730	1030	385	430	-10	183	S 3b - Z 60/24 - Z 35/38	145	
		11	160 M	462	3	320	—	—	160	344	241	243	20	30	55	150	930	1230	400	455	9	183	S 3b - Z 60/24 - Z 35/38	158	
	3	7,5	132 M	539	2	300	363	—	150	297	213	174	18	26	48	150	730	1030	385	430	47	183	S 3b - Z 60/24 - Z 35/38	166	
		11	160 M	539	3	320	—	—	160	344	241	243	20	30	55	150	930	1230	400	455	-8	184	S 4a - Z 60/24 - Z 40/42	227	
		15	180 L	539	3	320	—	—	160	394	241	243	20	30	55	150	930	1230	400	455	13	184	S 5a - Z 60/24 - Z 50/42	248	
4	11	160 M	625	3	320	—	—	160	344	241	243	20	30	55	150	930	1230	400	455	30	184	S 4a - Z 60/24 - Z 40/42	235		
	15	180 L	625	3	320	—	—	160	394	241	243	20	30	55	150	930	1230	400	455	51	184	S 5a - Z 60/24 - Z 50/42	256		
	18,5	180 M	625	3	358	—	—	180	309	358	277	20	30	55	150	930	1230	400	455	51	184	S 5a - Z 60/24 - Z 50/48	308		
ACLD R 63	1	4	112 M	424	2	255	322	—	150	246,5	164,5	154	15	22	45	100	650	850	308	345	-21	182	S 3b - Z 60/28 - Z 35/38	131	
		5,5	132 S	424	2	300	363	—	150	259	213	174	18	26	48	150	730	1030	385	430	-40	183	S 3b - Z 60/28 - Z 35/38	154	
		7,5	132 M	424	2	300	363	—	150	297	213	174	18	26	48	150	730	1030	385	430	-20	183	S 3b - Z 60/28 - Z 35/38	167	
	2	7,5	132 M	515	2	300	363	—	150	297	213	174	18	26	48	150	730	1030	385	430	25	183	S 3b - Z 60/28 - Z 35/38	179	
		11	160 M	515	3	320	—	—	160	344	241	243	20	30	55	150	930	1230	400	455	31	184	S 4a - Z 60/28 - Z 40/42	240	
		15	180 L	515	3	320	—	—	160	394	241	243	20	30	55	150	930	1230	400	455	-9	184	S 5a - Z 60/28 - Z 50/42	261	
	3	11	160 M	606	3																				

