Compact hydraulic power packs type KA and KAW

The ready-for-connection compact hydraulic power pack consists of a housing (tank) with integrated motor and pump. The tank volume (effective volume) can be increased by extensions. A vertical and a horizontal variant are available. A filling gauge enables visual control of the fluid level even during operation. The electrical connections are made via an integrated terminal box. Compact control systems can be created by mounting various combinations of connection blocks and valve banks. Float switches and temperature switches are optionally available for perfect monitoring.

Nomen-clature:	**Radial piston or gear pump with integrated motor single or dual circuit pump**
Design:	**Oil immersed hydraulic power pack for intermittent or load/no load operation (S3-service)**
p_{max}:	**Radial piston pump 700 bar Gear pump 180 bar**
Q_{max}:	**Radial piston pump approx. 7 lpm (V_g = 2.29 cm³/rev) Gear pump approx. 24.1 lpm (V_g = 7.9 cm³/rev)**
$V_{tank\ max}$:	**2 ... 10 l**

Features and benefits:

- Additional external fan for optimum load set
- Fill/effective volumes can be flexibly extended by modular tank extensions
- Long service life and high reliability achieved by using radial piston pumps
- Low oil fill volume makes it environmentally sound thanks to the small amount of oil to be disposed of and the low costs for hydraulic fluid
- Co-ordinated range of valves and accessories from modular system
- Suitable for vertical and horizontal installation
- Optimum efficiency achieved by suboil motor cooling, direct transmission of force and cleverly designed heat dissipation

Intended applications:

- Brake and rotor adjustment modules on wind turbines
- Clamping systems on machine tools and appliances
- Torque wrenches
- Rivets and clinching equipment
- Presses
- Handling systems

Design and order coding example

KA28	22	L1	KFTP	/HZ0,59/8,8	- ...	- 3x400V	- G1/2x300

Oil drain hose

Motor voltage 3 ~ 400V 50 Hz, 3 ~ 460V 60 Hz, 3 ~ 690V 50 Hz, 1 ~ 230V 50 Hz, 1 ~ 110V 60 Hz (1~phase motor)

Valve design

Pump version

Single circuit pump
- Radial piston pump H or gear pump Z

Dual circuit pump
- with joint connection pedestal for pressure connections P1 and P3
- Combinations: Radial piston pump - radial piston pump (HH) and radial piston pump - gear pump (HZ)

Additional function
- Oil sight glass
- Filling gauge with float switch
- Temperature switch
- Silica gel filter (instead of breather filter)
- Additional fans
- Various electrical connection variants (type KA...S)

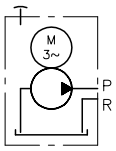
Installation position Horizontal version with low installation heights (type KA..L) or vertical version (type KA..S)

Tank size [l]

Basic type, size Type KA (3~phase motor) and KAW (1~phase motor, power reduction 30 ... 50% dep. on size), size 2 and 4

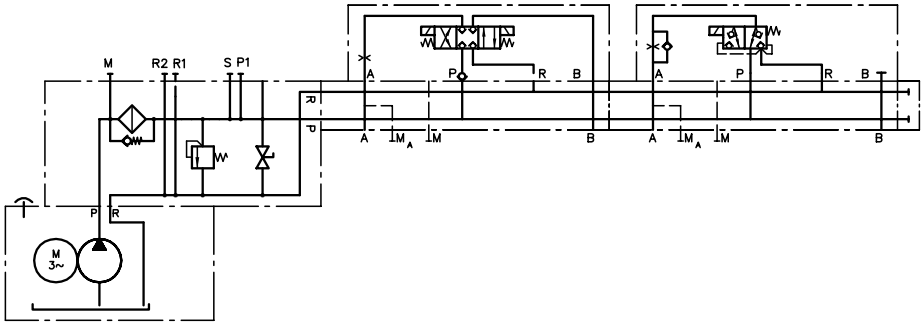
Function

Switching symbol:

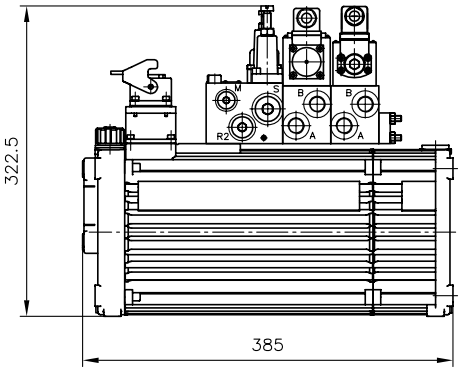


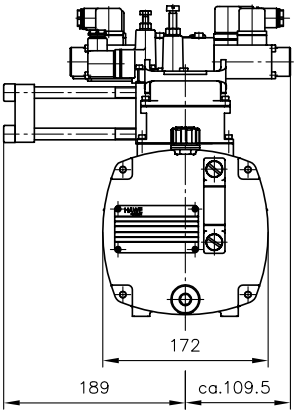
KA 231 LKP/H 0.59 - A1 D 10-B 400-3/380 - BA 2

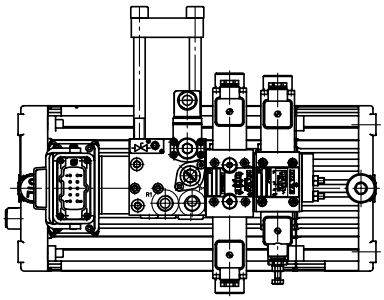
- NBVP 16 G/R/AB 2.0 - M/0
- NBVP 16 Y/ABR 1.5/4 - M/0
- 1 - G 24



General parameters and dimensions







	3-cylinder radial piston pump			6-cylinder radial piston pump			Gear pump			
	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	P_N [kW]
KA 21	700 - 45	0,63 - 10,02	0,76 - 12,05	360 - 55	1,26 - 7,84	1,52 - 9,42	170 - 60	2,23 - 6,7	2,68 - 8,04	0,55
KA 22	700 - 140	0,63 - 0,02	0,76 - 12,05	700 - 180	1,26 - 7,84	1,52 - 9,42	170 - 55	2,23 - 22,04	2,68 - 26,47	1,1
KA 23	700 - 60	0,31 - 4,89	0,37 - 5,93	485 - 30	0,62 - 9,79	0,75 - 11,85	170 - 50	1,09 - 4,90	1,32 - 5,94	0,37

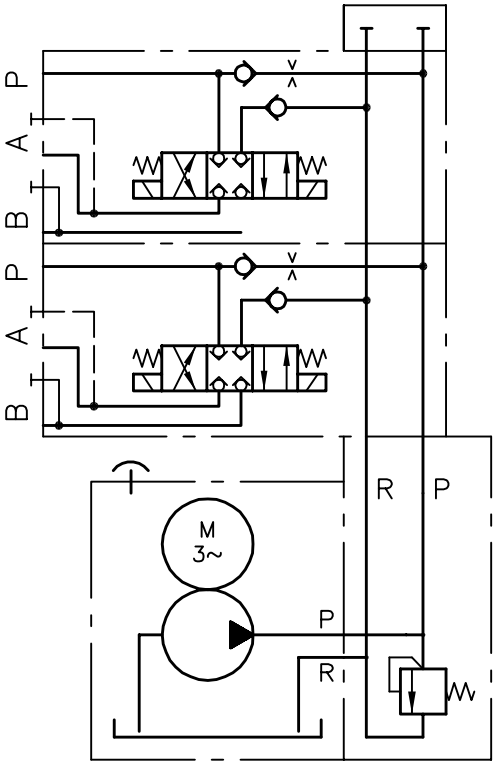
	3-cylinder radial piston pump			6-cylinder radial piston pump			Gear pump			
	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	P_N [kW]
KA 24	700 - 160	0,31 - 4,89	0,37 - 5,93	700 - 80	0,62 - 9,79	0,75 - 11,85	170 - 65	1,09 - 10,74	1,32 - 13,04	0,75
KA 26	700 - 160	0,63 - 10,02	0,76 - 12,05	700 - 205	1,26 - 7,84	1,52 - 9,42	170 - 65	2,23 - 22,04	2,68 - 26,47	1,4
KA 28	700 - 185	0,31 - 4,89	0,37 - 5,93	700 - 90	0,62 - 9,79	0,75 -11,85	170 - 75	1,09 - 10,74	1,32 - 13,04	1,0

	3-cylinder radial piston pump			6-cylinder radial piston pump			Gear pump			
	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	p_{max} [bar]	Q_{max} [lpm] 50 Hz	Q_{max} [lpm] 60 Hz	P_N [kW]
KA 44	700 - 220	0,84 - 5,98	1,01 - 7,25	700 - 110	1,68 - 11,97	2,04 - 14,53	200 - 130	0,84 - 9,1	1,01 - 11,1	- 1,5
										- 2,2
										- 3,0

Example circuit:

KA 44 S/H 3.2

-A 1/250
-BVH 11 G/GM/R/2
-BVH 11 G/GM/R/2
-GM 24
3x400V Hz-1.5kW



Associated technical data sheets:

- Compact hydraulic power packs type KA: D 8010, D 8010-4

Similar products:

- Compact hydraulic power packs type HC and HCG: D 7900 G

Suitable connection blocks:

- Types A, B and C: D 6905 A/1, D 6905 B, D 6905 C

Directly mountable valve banks:

- Type VB: D 7032
- Type BWH, BWN: D 7470 B/1
- Type BVZP: D 7785 B
- Type SWR, SWS: D 7450, D 7451D 7951
- Type BA: D 7788
- Type BVH: D 7788 BV

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