

Feature	Basic Applications	General Purpose	High Performance		Fan & Pump
	XKL	SD1	HD1	HD2	HD2IP
General specifications					
Single Phase input	0.4-2.2kW	0.4-2.2kW	x	x	x
Three phase input	0.75-2.2kW	0.75-110kW	0.4-500kW	1.5-500kW	4.0-110kW
Constant Torque (HD)	●	●	●	●	●
Variable Torque (ND)	x	x	●	x	●
Torque Vector	x	●	●	●	●
Maximum Torque	150%	150%	200%	150%	200%
EMC Filter	x	●	●	●	●
DC Reactor	x	≥18.5kW	x	18.5-110kW	18.5-110kW
AC Reactor	x	x		≥355kW	
External Mountable Keypad	●	○	●	●	○
Maximum Frequency	400Hz	400Hz	400Hz	400Hz	400Hz
IP Rating	IP20	IP20	IP20	IP20	IP55
Approvals					
CE	●	●	●	●	●
UL/cUL	x	≤11kW	●	x	x
RoHS	●	●	●	●	●
TUV	●	●	●	●	●
Inputs/outputs					
Analogue Inputs	1	2	3	2	2
Digital Inputs	4/5	4	9	6	6
Pulse Train Inputs	x	1	1	2	2
Analogue Outputs	1	1	2	2	1
Relay Outputs	1	2	2	2	2
Digital Outputs	1	1	2	1	2
Pulse Train Output	x	x	●	●	1
Control functions					
PID Control	●	●	●	●	●
Braking Chopper	●	●	≤30kW	≤37kW	≤37kW
DC Braking	●	●	●	●	●
Preset Speeds	15	15	15	15	15
Safe Torque Off (STO)	x	●	x	●	●
Mechanical Brake Control	x	x	●	●	●
Torque Control	x	●	●	●	●
Closed Loop	x	x		●	●
Parameter copy function - Keypad	x	○	●	●	●
Built-in PLC	●	●	●	●	●
Real Time Clock	x	x	x	●	●
Regenerative Avoidance Control	x	x	●	●	●
Catch spinning motor	x	●	●	●	●
Application functions					
Cumulative kWh Data Log	x	x	●	●	●
Cascading Pump Control	x	x	x	x	●
Comms					
RS485 - ASCII	●	●	●	●	●
Modbus RTU	●	●	●	●	●
Profibus -DP	x	x	○	○	○
Profinet		x	○	○	○
Ethernet	x	x	x	○	○
Ethernet/IP	x	x	x	○	○
CANopen	x	x	○	○	○
Modbus TCP	x	x	○	○	○
EtherCAT	x	x	x	○	○
Bluetooth	x	x	x	○	○
USB Port	x	x	●	●	●
Bluetooth	x	x	x	○	○
Wifi	x	x	x	○	○
Options					
DIO	x	x	x	○	○
AIO	x	x	x	○	○
Multi IO	x	x	x	○	○
Relay	x	x	x	○	○
Encoder Feedback(PG)	x	x	x	○	○

Yes option No
● ○ x