

## KeDrive D4 – Power Units



Models	HCS02.1E-W0012	HCS02.1E-W0028	HCS02.1E-W0054	HCS02.1E-W0070
with integrated control voltage supply	-A-03-NNNV	-A-03-NNNV	-A-03-NNNV	-A-03-NNNV
no additional options	-A-03-NNNN	-A-03-NNNN	-A-03-NNNN	-A-03-NNNN
<b>Performance data</b>				
- Continuous current <sup>1</sup>	4,5 A	11,3 A	20,6 A	28,3 A
- Maximum current	11,5 A	28,3 A	54 A	70,8 A
- DC bus continuous power without/with choke	2,1 kW / 2,1 kW	5,1 kW / 5,1 kW	7 kW / 10 kW	9 kW / 14 kW
- Maximum output without/with choke	5 kW / 5 kW	8 kW / 10 kW	12 kW / 16 kW	14 kW / 19 kW
- Mains voltage	3 AC 200 ... 500 V, 1 AC 200 ... 250 V (+/-10 %)			
- Continuous input mains current	6 A	13 A	19 A	30 A
- Dependence of output on mains voltage	at ULN < 400 V: 1 % power reduction per 4 V at ULN < 400 V: 1 % power gain per 5 V			
- DC bus terminal <sup>2</sup>	-	Y	Y	Y
- DC bus capacity	135 µF	270 µF	405 µF	675 µF
<b>Switching frequency/max. output frequency</b>	4 kHz / 400 Hz 8 kHz / 800 Hz 12 kHz / 1.200 Hz 16 kHz / 1.600 Hz			
<b>Brake resistor</b>				
- Brake resistor	internal	internal	internal/external	internal/external
- Maximum braking energy consumption	1 kW/s	5 kW/s	9 kW/s	13 kW/s
- Continuous braking power	0,05 kW	0,15 kW	0,35 kW / 3,8 kW	0,5 kW / 5,5 kW
- Maximum braking power	4 kW	10 kW	18 kW	25 kW
<b>Control voltage data</b>				
- Control voltage, internal	DC 24 V (not for supply of motor holding brake)			
- Control voltage, external	DC 24 V ± 20 % (DC 24 V ± 5 % when supplying motor holding brake)			
- Power consumption without control unit and motor brake	12 W	14 W	23 W	23 W
- Continuous current without control unit and motor brake	0,5 A	0,6 A	1,0 A	1,0 A
<b>Mechanical data</b>				
- Height H	290 mm	352 mm	352 mm	352 mm
- Width W	65 mm	65 mm	105 mm	105 mm
- Depth D (incl. plug)	252 mm	252 mm	252 mm	252 mm
- Mass	2,9 kg	3,8 kg	6,7 kg	6,8 kg
<b>Ambient conditions</b>	0 ... +40 °C, with derating to +55 °C 5 ... 95 % (as per EN 61800-5-1), condensation not permitted 2 (as per EN 61800-5-1) Air cooling IP20			
- Protection mode	IP20			
<b>Installation height</b>	1.000 m over NN, with derating to 4.000 m			
<b>CE-mark</b>	Complies with the low voltage directive 73/23/EEC and the EMC directive 89/336/EEC			
<b>Certification</b>	UL, cUL			
<b>EMC</b>	as EN 61800-3			

Models	HCS03.1E-W0070	HCS03.1E-W0100	HCS03.1E-W0150	HCS03.1E-W0210
with integrated control voltage supply	-A-05-NNNV	-A-05-NNNV	-A-05-NNNV	-A-05-NNNV
no additional options	-A-05-NNBV	-A-05-NNBV	-A-05-NNBV	-A-05-NNBV
<b>Performance data</b>				
- Continuous current <sup>1</sup>	45 A	73 A	95 A	145 A
- Maximum current	70 A	100 A	150 A	210 A
- DC bus continuous power without/with choke	13 kW / 25 kW	24 kW / 42 kW	34 kW / 56 kW	42 kW / 85 kW
- Maximum output without/with choke	20 kW / 40 kW	33 kW / 59 kW	54 kW / 89 kW	68 kW / 124 kW
- Mains voltage	3 AC 400 ... 500 V (+10 %/-15 %)			
- Continuous input mains current	50 A	80 A	106 A	146 A
- Dependence of output on mains voltage	at ULN < 400 V: 1 % power reduction per 4 V			
- DC bus terminal <sup>2</sup>	Y	Y	Y	Y
- DC bus capacity	940 µF	1440 µF	1880 µF	4700 µF
<b>Switching frequency/max. output frequency</b>	4 kHz / 400 Hz 8 kHz / 800 Hz 12 kHz / 1.200 Hz 16 kHz / 1.600 Hz			
<b>Brake resistor</b>	external			
- Brake resistor	external			
- Maximum braking energy consumption	13,2	18,9	25,2	42,6
- Continuous braking power	42 kW	63 kW	97 kW	137 kW
- Maximum braking power	42 kW	63 kW	97 kW	137 kW
<b>Control voltage data</b>				
- Control voltage, internal	DC 24 V (not for supply of motor holding brake)			
- Control voltage, external	DC 24 V ± 20 % (DC 24 V ± 5 % when supplying motor holding brake)			
- Power consumption without control unit and motor brake	23 W	25 W	25 W	30 W
- Continuous current without control unit and motor brake	0,9 A	1,0 A	1,0 A	1,3 A
<b>Mechanical data</b>				
- Height H	440 mm	440 mm	440 mm	440 mm
- Width W	125 mm	225 mm	225 mm	350 mm
- Depth D (incl. plug)	309 mm	309 mm	309 mm	309 mm
- Mass	13 kg	20 kg	20 kg	38 kg
<b>Ambient conditions</b>	0 ... +40 °C, with derating to +55 °C 5 ... 95 % (as per EN 61800-5-1), condensation not permitted 2 (as per EN 61800-5-1) Air cooling IP20			
- Protection mode	IP20			
<b>Installation height</b>	1.000 m over NN, with derating to 4.000 m			
<b>CE-mark</b>	Complies with the low voltage directive 73/23/EEC and the EMC directive 89/336/EEC			
<b>Certification</b>	UL, cUL			
<b>EMC</b>	as EN 61800-3			

All data apply to nominal rating at 3 AC 400 V mains voltage and 4 kHz switching frequency

<sup>1</sup> Limitation of output currents for output frequencies < 4 Hz

<sup>2</sup> For the connection of additional units, such as HMS, HCS, HLB, HLC