

Selection Guide | iC2-Micro

iC2-Micro Performance that pays off

Run reliably at full
load for ambient
temperatures up to

50°C



Specification

Mains supply (L1, L2, L3)

Supply voltage	200-240 V (-15%/+10%) 380-480 V (-15%/+10%)
Supply frequency	50/60 Hz
Displacement power factor (cos φ)	Near unity (> 0.98)
Switching frequency on input supply L1, L2, L3	Switching maximum 2 times/minute

Output data (U, V, W)

Output voltage	0-100% of supply voltage
Switching on output	Unlimited
Ramp times	0.01-3600 s
Frequency range	Induction motor <ul style="list-style-type: none"> • 0-200 Hz (VVC+ mode) • 0-500 Hz (U/f mode) PM motor <ul style="list-style-type: none"> • 0-400 Hz(VVC+ mode)

Overload capacity

Overload torque	150% for 60 s every 10 min
Overload torque at start	200% for 1 s

Programmable digital inputs and outputs

Digital inputs/ digital outputs*	5/1
Logic	PNP or NPN
Voltage level	0/24 V DC

*Note: One digital input can be configured as digital output.

Pulse input and output

Pulse input / Pulse output**	1/1, voltage level 0/24 V DC
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**Note: One digital input can be configured as pulse input. Another digital input can be configured as pulse output.

Programmable analog inputs and output

Analog inputs	2, voltage or current Voltage level: 0 V to +10 V (scaleable) Current level: 0/4 to 20 mA (scaleable)
Analog output	1 (current range 0/4 to 20 mA)

Programmable relay output

Programmable relay output	1 (NO/NC 240 VAC, 2 A / 30 VDC, 2 A)
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Electric data

iC2-Micro mains supply 1 x 200-240 V AC

Enclosure IP20/Open Type		MA01c		MA02c	MA02a
		02A2	04A2	06A8	09A6
Typical shaft output	[kW]	0.37	0.75	1.5	2.2
	[hp]	0.5	1.0	2.0	3.0
Output current					
Continuous (3 x 200-240 V AC)	[A]	2.2	4.2	6.8	9.6
Intermittent (3 x 200-240 V AC)	[A]	3.3	6.3	10.2	14.4
Maximum cable size					
Mains, motor	[mm ² /AWG]	4/10			
Maximum input current					
Continuous (1 x 200-240 V)	[A]	6.1	11.6	18.7	26.4
Intermittent (1 x 200-240 V)	[A]	8.3	15.6	26.4	37.0
Environment					
Power loss ¹⁾	[W]	16	31	46	61
Efficiency ¹⁾	[%]	97.5	97.6	97.6	97.9

iC2-Micro mains supply 3 x 380-480 V AC

Enclosure IP20/Open Type		MA01a			MA02a		
		01A2	02A2	03A7	05A3	07A2	09A0
Typical shaft output	[kW]	0.37	0.75	1.5	2.2	3.0	4.0
Typical shaft output [hp]	[hp]	0.5	1.0	2.0	3.0	4.0	5.5
Output current							
Continuous (3 x 380-440 V)	[A]	1.2	2.2	3.7	5.3	7.2	9.0
Intermittent (3 x 380-440 V)	[A]	1.8	3.3	5.6	8.0	10.8	13.7
Continuous (3 x 440-480 V)	[A]	1.1	2.1	3.4	4.8	6.3	8.2
Intermittent (3 x 440-480 V)	[A]	1.7	3.2	5.1	7.2	9.5	12.3
Maximum cable size							
Mains, motor	[mm ² /AWG]	4/10					
Maximum input current							
Continuous (3 x 380-440 V)	[A]	1.9	3.5	5.9	8.5	11.5	14.4
Intermittent (3 x 380-440 V)	[A]	2.6	4.7	8.7	12.6	16.8	20.2
Continuous (3 x 440-480 V)	[A]	1.7	3.0	5.1	7.3	9.9	12.4
Intermittent (3 x 440-480 V)	[A]	2.3	4.0	7.5	10.8	14.4	17.5
Environment							
Power loss ¹⁾	[W]	17	25	34	48	58	74
Efficiency ¹⁾	[%]	97.3	97.8	98.0	98.3	98.5	98.3

¹⁾ The value is measured at 100% rated torque-producing current and 90% rated motor stator frequency according to IEC 61800-9-2 and EN 50598-2.

Ordering model code

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
i	C	2	-	3	0	F	A	3	N	0	4	-	0	1	A	2	E	2	0	F	4	+	A	C	X	X
								1	N	0	2									F	2		A	C	B	C
																				F	0					

<p>Product group iC2-30</p>	<p>Product category FA Frequency converter air cooled</p>	<p>Product type 3N Three phases 1N Single phase</p>	<p>Mains voltage 04 380-480 V AC 02 200-240 V AC</p>	<p>*Current rating 01A2 1.2 A 02A2 2.2 A 03A7 3.7 A 04A2 4.2 A 05A3 5.3 A 06A8 6.8 A 07A2 7.2 A 09A0 9.0 A 09A6 9.6 A</p>	<p>Protection rating E20 IP20/Open Type</p>	<p>EMC category F4 C4 category F2 C2 category F0 C1 category</p>	<p>Brake chopper +ACXX None +ACBC Integrated</p>
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* See power rating on page 8

