

Atom-SLIM Ver.3.5

A Power-Supply Separated Miniature High Performance AC Servo Driver

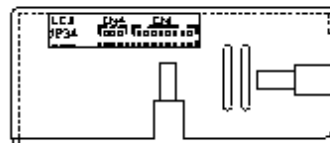
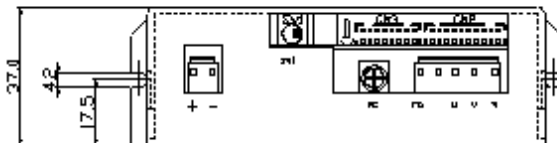
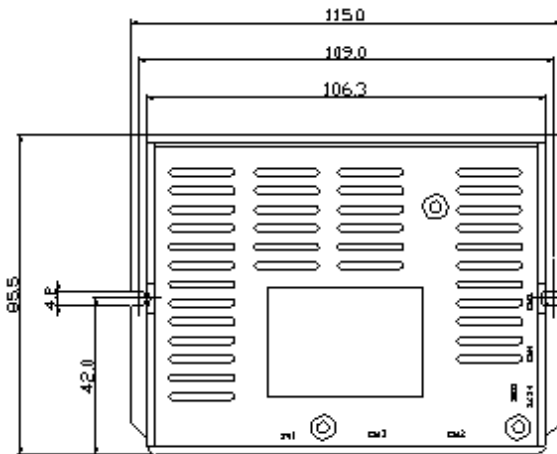
Atom-SLIM is a miniature high performance AC servo motor driver with the main power supply separated. Due to its compactness and minimal wiring feature, **Atom-SLIM** is especially oriented to the applications where space is limited or where it is desirable that the motor and its driver be located in close proximity.

Features:

1. **32 bits RISC CPU (DYNAX new CBIC chip)**
2. **Built-in high precision PTP control**
3. **Max 31 drivers can be linked in a serial link.**
4. **RS485 Communication with Fics-series controller**
5. **Compact size and minimal wiring**
6. **Low cost and high performance**
7. **Applicable to various AC motors such as MINAS series and Yasukawa S series**

Technical Data:

Applicable motors:	200V not exceeding 400W or 100V not exceeding 200W
Main power:	DC140-160/280-320
Max out. current:	8 (A)
Protections:	Over-current, Encoder error
Working temperature:	0-50°C
Working humidity:	less than 85%



[Applicable Motor]

Any AC servo motors not exceeding 400W are applicable.

Consult our sales office for input voltage of the main power supply and other details.

Type	x0	x1	x2	x3	x4	x5	x6	x7	x8	X9	
MINAS 1	0x		30W	50W	100W	200W	400W				(100V)
MINAS 2	1x		30W	50W	100W	200W	400W				(200V)
Ó 100V	2x		30W	50W	100W	200W	300W				(100V)
Ó 200V	3x		30W	50W	100W	200W	400W				(200V)

[I/O Connector]

[CN2] DF11-20DS-2C(HIROSE)
DF11-2428SC(HIROSE)

PIN	SIGNAL	IN/OUT	PIN	SIGNAL	IN/OUT
1	+24V	IN	2	DO-1(SVRDY)	OUT
3	+OV(+ limit)	IN	4	Alarm	OUT
5	-OV(- limit)	IN	6	DO-2	OUT
7	ORG	IN	8	DI-2	IN
9	DI-1(EMG)	IN	10	NC	-
11	Alarm Reset	IN	12	NC	-
13	+24VGND	-	14	GND	OUT
15	D485+	IN/OUT	16	ANALOG OUT	OUT
17	D485-	IN/OUT	18	ANLOG IN	IN
19	485GND	-	20	ANALOG GND	-

[Encoder Connector]

[CN3]DF11-16DS-2C(HIROSE)
DF11-2428SC(HIROSE)

		Σ series		MINAS series	
PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
1	A+	1	A+	1	A+
2	A-	2	A-	2	A-
3	B+	3	B+	3	B+
4	B-	4	B-	4	B-
5	Z+	5	C+	5	Z+
6	Z-	6	C-	6	Z-
7	U+	7		7	11 RX+
8	U-	8		8	12 RX-
9	V+	9		9	
10	V-	10		10	
11	W+	11		11	
12	W-	12		12	
13	GND	13	7 GND	13	14 GND
14	+5V	14	8 +5V	14	13 +5V
15	NC	15	NC	15	NC
16	FG	16	9 FG	16	15 FG

[Fics-RT1 Interface]

[CN4]DF11-6DS-2C(HIROSE)
DF11-2428SC(HIROSE)

Pin	SIGNAL	IN/OUT	Pin	SIGNAL	IN/OUT
1	RXD	IN	2	TXD	OUT
3	DSR	IN	4	DTR	OUT
5	+5V	OUT	6	GND	-

[Attachment]

Connectors mentioned above are all attached.

[Fics-RT2 Interface]

[CN1]DF11-14DS-2C(HIROSE)
DF11-2428SC(HIROSE)

PIN	SIGNAL	IN/OUT	PIN	SIGNAL	IN/OUT
1	A+	OUT	2	A-	OUT
3	B+	OUT	4	B-	OUT
5	OPA0	OUT	6	*OPRD	OUT
7	*OPWR	OUT	8	OPD3	IN/OUT
9	OPD2	IN/OUT	10	OPD1	IN/OUT
11	OPD0	IN/OUT	12	+5VOUT	OUT
13	GND	-	14	+5VOUT	OUT

[Motor Power Interface]

[CN6]VHR-5N(JST)
BVH-21T-1.1(JST)

PIN	SIGNAL	IN/OUT
1	FGND	-
2	NC	-
3	U	OUT
4	V	OUT
5	W	OUT

[Main Power Supply] DC280V/140V input

[CN5]VHR-2N(JST)
BVH-21T-1.1(JST)

PIN	SIGNAL	IN/OUT
1	+280V/140V	IN
2	0V	-

[Jumpers]

JP1: Close if the driver is the last terminal of RS485

JP2: Open (fixed)

[LED] LD1: GREEN Servo ready

LD2: RED ALARM

LD3: UMBER φZ

*LD3 blinks when power ON and servo OFF.

(It does not blink if Z-phase signal is used as control for ABS motors).