

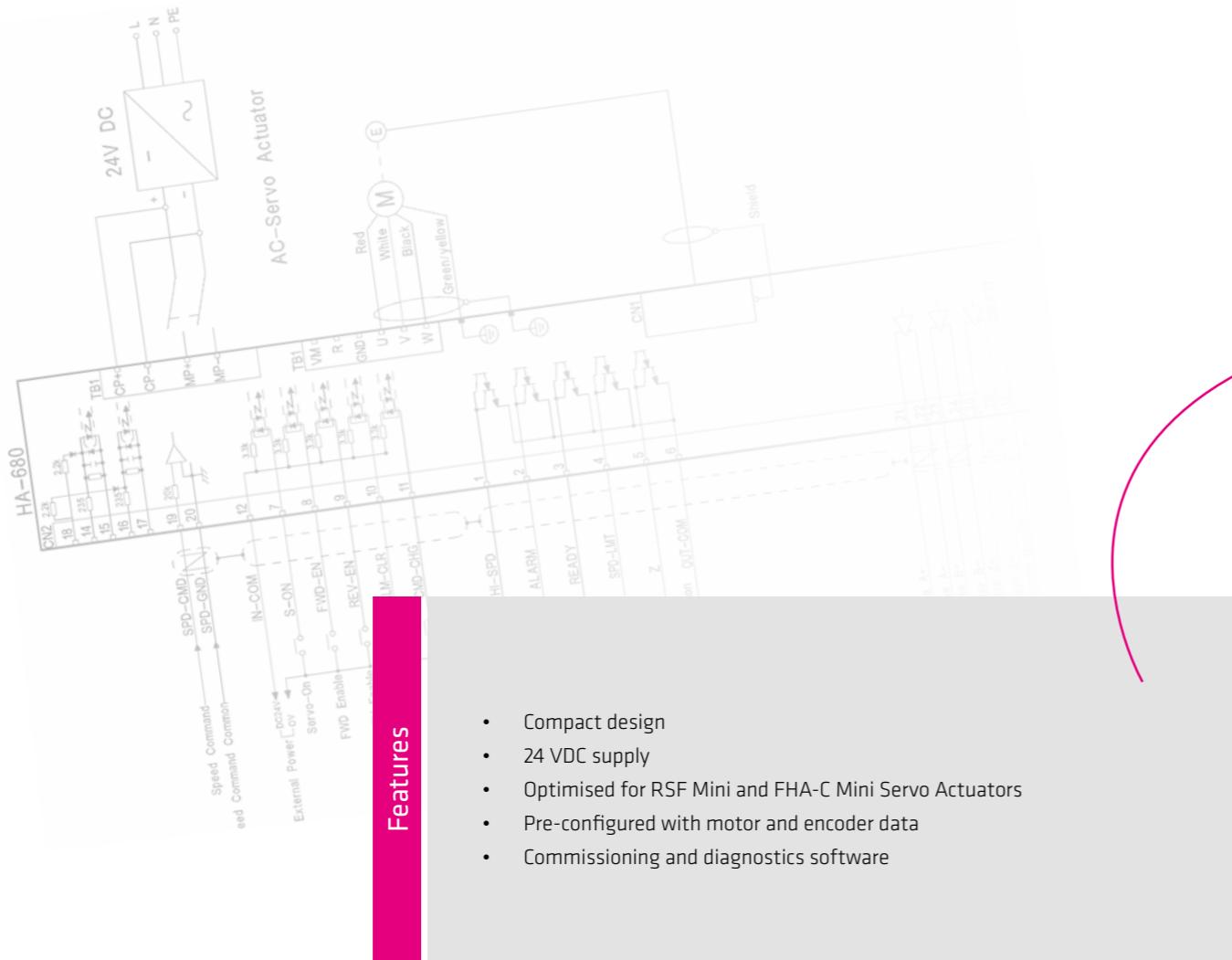
Controller for mini servo actuators

The HA-680 Servo Controller is specially designed to meet the needs of the FHA-C Mini and RSF Mini Series Actuators, tuned to offer the best control performance.

The HA-680 Servo Controller is the perfect complement to the Harmonic Drive® Mini Servo Actuators and provides a single source for a pre-configured drive system.

Designed for a connection voltage of 24 VDC, the HA-680 can be used in the current controller, speed controller or position controller modes. Different field buses and modes enable a variety of control concepts and thus offer a comprehensive range of solutions for your motion requirements.

Separate inputs for power and electronics supply voltages enable the implementation of safety relevant functions.



Ordering code

Table 118.1

Series	Field bus	Rated current	Power supply	Option 1	Special design
HA-680	ML CL	4 6 4B 6B	20 ... 28 VDC	Sxxx (Only for HA-680ML)	According to customer requirements
Ordering code					
HA-680	-	ML	-	4B	-
			24	-	Sxxx
				-	SP

Table 118.2

Field bus	
Ordering code	Field bus
-	Without
ML	MECHATROLINK
CL	CC-Link

Table 118.3

Rated current	
Ordering code	Description
4	4 A _{eff} for FHA-C Mini
6	6 A _{eff} for FHA-C Mini
4B	4 A _{eff} for RSF Mini
6B	6 A _{eff} for RSF Mini

Table 118.4

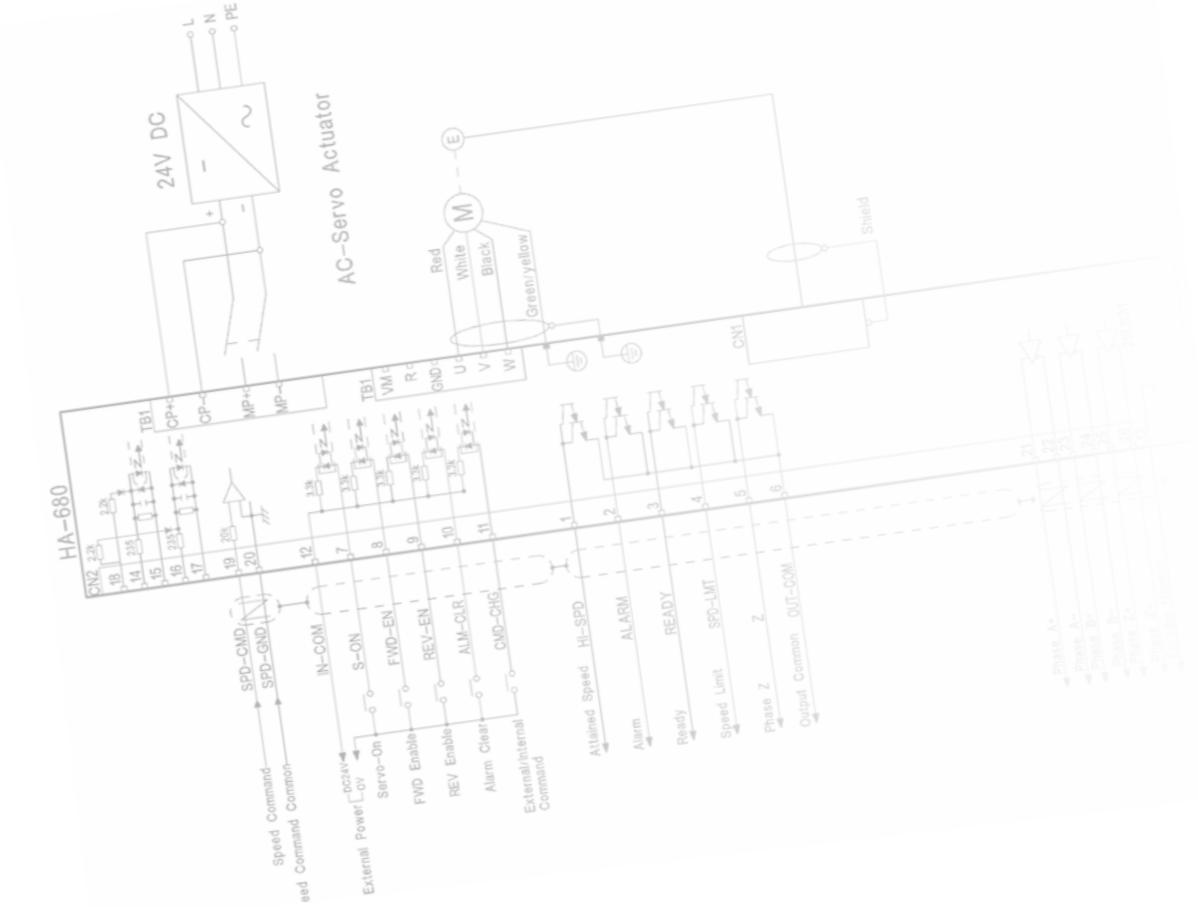
Option 1	
Ordering code	Description
Sxxx	Control number for model adaptation (Only for HA-680ML)

Combinations

Table 119.1

	Motor feedback	Size			
		HA-680xx-4	HA-680xx-6	HA-680xx-4B	HA-680xx-6B
FHA-8C	D200 E200	● ○	-	-	-
FHA-11C	D200 E200	● ○	-	-	-
FHA-14C	D200 E200	-	-	● ○	-
RSF-3C	E020	-	-	-	●
RSF-5B	E050	-	-	● ○	-
RSF-8B	F100	-	-	● ○	-
RSF-11B	F100	-	-	-	-
RSF-14B	F100	-	-	-	● ○

● available ○ on request - not available



Technical data

Table 120.1

		Unit	HA-680xx-4x-24	HA-680xx-6x-24
Supply voltage	Main circuit	U_N [VDC]	20 ... 28	
	Control circuit	U_N [VDC]	20 ... 28	
Rated current		I_N [A]	4	6
Maximum current		I_{max} [A]	8.4	16.5
Cooling			Air cooling	
Field bus			MECHATROLINK CC-Link	
Dimensions (W x H x D)	[mm]		115 x 34 x 79.5 (Variant with field bus has other dimensions)	
Weight	m [kg]		0.23	
Analogue input (± 10 VDC, 13 bit)			1	
Digital inputs and outputs			5 / 5	
Encoder monitor			1	
Motor feedback			Wire, incremental, square wave signal Wire, incremental, serial interface ¹⁾	
Ambient operating temperature	[°C]		0 ... 50	

¹⁾ On request