



CFW320 Mini Drives



Revision 7/2024

MAIN FEATURES

CFW320 - MINI DRIVES

Motors | Automation | Energy | Transmission & Distribution | Coatings

- Meets the UL 61800-5-1 standard
- Degree of Protection: IP20
- Same frame sizes as the CFW300, Frame-A, B and C (New).
- Same current range as the CFW300-120VAC/230VAC:
 - 1.6...6.0 A @ 110-127 Vac – 0.75...2 HP
 - 1.6...15.2 A @ 200-240 Vac – 0.25...5 HP
 - 1.1...14.0 A @ 480 Vac – 0.5...10 HP
- Control methods: Scalar (V/F) & Voltage Vector WEG (VFW) control
- Ambient temperature of 50°C for 120Vac/230Vac models; 40° for 460Vac models.
- Built-in standard - 4 Digital Inputs, 1 Analog Input and 1 Relay output
- 2 independent slots for function expansion – Slot#1 (upper Slot) for Communication and Slot #2 (lower Slot) for I/O expansion
- Plug-in modules: RS485 (Modbus RTU / BACnet), RS232, CANopen, Profibus-DP, dual Ethernet, Potentiometer, USB, Encoder, Infrared, I/O expansion, RFI filter
- SoftPLC: adds the functionalities of a PLC
- Power supply through DC link (standard in frames B and C)



INDUSTRIES AND APPLICATIONS

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- Food and beverage industry (packaging machines, mixing machines, container filling, pumping (ingredient), ingredient blending/mixing, etc.)
- Small handling applications (process feeders, car washes, conveyors, laundry machines, door/gate openers, etc.)
- Air circulation (kitchen ventilation, parking garages, greenhouses, clean rooms, etc.)
- The medical and health sector (medical beds, fitness machines)
- Machines with a single-phase power source (woodworking machines, surface polishing and cleaning machines, swimming pool or irrigation pumps, etc.)
- New markets (solar applications, etc.)
- Simple mechanical applications



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Power Supply (V)	Phase	CFW500 (A)	CFW320 (A)
460	Three-phase	211	15.2
230	Three-phase	211	15.2
230	Single-phase	10	5
120	Single-phase	-	5

TECHNICAL CHARACTERISTICS

CFW300 MINI DRIVES



POWER RANGE

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AC Power Supply

FRAME	VOLTAGE	HP	KW
A	110-127 Vac / 1Ph	0.25 – 2.0	0.18 – 1.5
	200-240 Vac / 1Ph	0.25 – 2.0	0.18 – 1.5
	200-240 Vac / 3Ph	0.25 – 2.0	0.18 – 1.5
	380-415 Vac / 3Ph	0.5 – 3.0	0.37 – 2.2
	440 - 480 Vac / 3Ph	0.5 – 3.0	0.37 – 2.2
B	200-240 Vac / 1Ph or 3Ph	3.0	2.2
	200-240 Vac / 3Ph	3.0 – 5.0	2.2 – 3.7
	380-415 Vac / 3Ph	0.5 – 5.0	0.37 – 3.7
	440 - 480 Vac / 3Ph	0.5 – 5.0	0.37 – 3.7
C	380-415 Vac / 3Ph	5.0 – 10.0	3.7 – 7.5
	440 - 480 Vac / 3Ph	5.0 – 10.0	3.7 – 7.5



DC Power Supply

FRAME	VOLTAGE	HP	KW
A	280-340 Vdc	0.25 - 2	0.18 – 1.5
B	280-340 Vdc	3 - 5	2.2 – 3.7
B	513-560 Vdc	0.5 - 5	0.37 – 3.7
B	594-650 Vdc	0.5 - 5	0.37 – 3.7
C	513-560 Vdc	5.0 – 10.0	3.7 – 7.5
C	594-650 Vdc	5.0 – 10.0	3.7 – 7.5



POWER RANGE

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230V AC

Motor Voltage	HP	Rated O/P Current	Catalog #	Max. Temp.	Brake Chopper
230 Vac Three Phase	Input Power Supply: 1/120 Vac				
	1/3	1.6	CFW320A01P6S1NB20	50°C	No
	1/2	2.6	CFW320A02P6S1NB20	50°C	No
	1	4.2	CFW320A04P2S1NB20	50°C	No
	1 1/2	6	CFW320A06P0S1NB20	50°C	No
	Input Power Supply: 1/200-240 Vac				
	1/3	1.6	CFW320A01P6S2NB20	50°C	No
	1/2	2.6	CFW320A02P6S2NB20	50°C	No
	1	4.2	CFW320A04P2S2NB20	50°C	No
	1 1/2	6	CFW320A06P0S2NB20	50°C	No
	2	7.3	CFW320A07P3S2NB20	50°C	No
	Input Power Supply: 3/200-240 Vac				
	1/3	1.6	CFW320A01P6T2NB20	50°C	No
	1/2	2.6	CFW320A02P6T2NB20	50°C	No
	1	4.2	CFW320A04P2T2NB20	50°C	No
	1 1/2	6	CFW320A06P0T2NB20	50°C	No
	2	7.3	CFW320A07P3T2NB20	50°C	No
	3	10	CFW320B10P0B2DB20	50°C	Yes
	5	15.2	CFW320B15P2T2DB20	50°C	Yes

460V AC

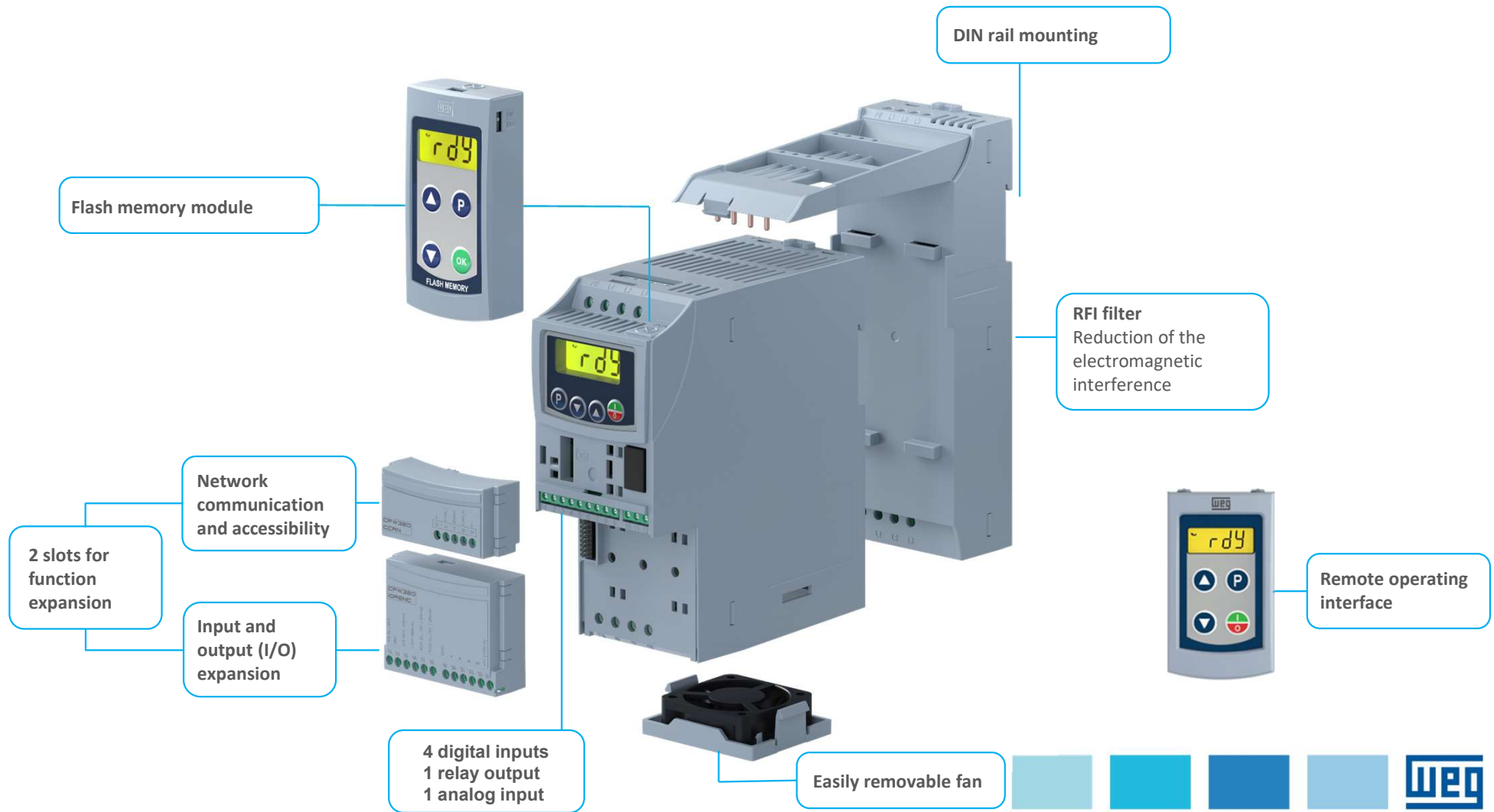
Motor Voltage	WEG Motor HP	Rated O/P Current	Catalog #	Max. Temp.	Brake Chopper
460 Vac Three Phase	Input Power Supply: 3/460-480 Vac (w/o DB Chopper)				
	1/2	1.1	CFW320A01P1T4NB20	40°C	No
	1	1.8	CFW320A01P8T4NB20	40°C	No
	1 1/2	2.6	CFW320A02P6T4NB20	40°C	No
	2	3.5	CFW320A03P5T4NB20	40°C	No
	3	4.8	CFW320A04P8T4NB20	40°C	No
	3	5.6	CFW320B05P6T4NB20	40°C	No
	5	7.6	CFW320B07P6T4NB20	40°C	No
	5	8.3	CFW320C08P3T4NB20	40°C	No
	7 1/2	11	CFW320C11P0T4NB20	40°C	No
	10	14	CFW320C14P0T4NB20	40°C	No
	Input Power Supply: 3/460-480 Vac (with DB Chopper)				
	1/2	1.1	CFW320B01P1T4DB20	40°C	Yes
	1	1.8	CFW320B01P8T4DB20	40°C	Yes
	1 1/2	2.6	CFW320B02P6T4DB20	40°C	Yes
	2	3.5	CFW320B03P5T4DB20	40°C	Yes
	3	4.8	CFW320B04P8T4DB20	40°C	Yes
	3	5.6	CFW320B05P6T4DB20	40°C	Yes
	5	7.6	CFW320B07P6T4DB20	40°C	Yes
	5	8.3	CFW320C08P3T4DB20	40°C	Yes
	7 1/2	11	CFW320C11P0T4DB20	40°C	Yes
	10	14	CFW320C14P0T4DB20	40°C	Yes



SIMPLE INSTALLATION

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FLEXIBILITY

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- Wide range of plug-in modules allows you to meet the application requirements
- Two slots available for function expansions



Upper Slot (Slot#1)
For Com. Module

Bottom Slot (Slot#2)
For I/O Exp. Module



PLUG-IN MODULES

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- The CFW320 includes 4 DI, 1AI, and 1 DOR as standard
- The following table provides details on additional IO options available using the upper slot of the drive (slot 1)

Reference	Slots ⁵⁾	Inputs			Outputs			Potentiometer for speed reference	USB ⁴⁾	Infrared sensors and NTC ³⁾	Bluetooth [®]	Encoder input ²⁾	Network communication		
		Analog	Digital	Frequency	Analog	Relay digital	Frequency						RS485	RS232	Others
CFW320-CRS485	Upper slot	-	-	-	-	-	-	-	-	-	-	-	1	-	-
CFW320-CRS232		-	-	-	-	-	-	-	-	-	-	-	-	1	-
CFW320-CCAN		-	-	-	-	-	-	-	-	-	-	-	-	-	CANopen or DeviceNet
CFW320-CPDP		-	-	-	-	-	-	-	-	-	-	-	-	-	Profibus-DP
CFW320-CUSB		-	-	-	-	-	-	-	1	-	-	-	-	-	-
CFW320-IOP		-	-	-	-	-	-	1	-	-	-	-	-	-	-
CFW320-CETH		-	-	-	-	-	-	-	-	-	-	-	-	-	Ethernet/IP or Modbus TCP
CFW320-CBLT ⁷⁾		-	-	-	-	-	-	-	-	-	1	-	-	-	-
CFW320-IOAR	Lower slot	1	-	-	1	3	-	-	-	-	-	-	-	-	-
CFW320-IODR ¹⁾		-	4	-	-	3	-	-	-	-	-	-	-	-	-
CFW320-IOAENC		1	-	-	2	-	-	-	-	-	-	1	-	-	-
CFW320-IOADR		1	-	-	-	3	-	-	-	1	-	-	-	-	-
CFW320-IOADR-D		-	-	-	-	3	-	-	-	1	-	-	-	-	-
CFW320-IODF		-	-	3	-	-	3	-	-	-	-	-	-	-	-



CCAN



CUSB



IODR



CETH



IOP



BUILT-IN DISPLAY

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Easy to Program

- Oriented start-up standard with step-by-step programming
- Soft keys allow easy access to parameters
- LCD operating interface with 4 digits



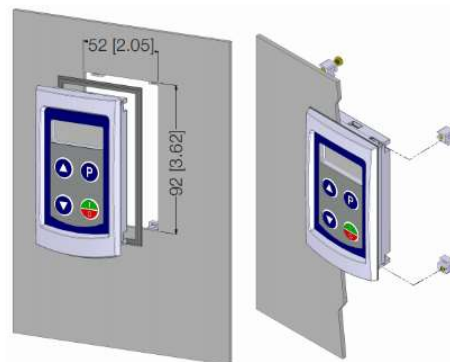
REMOTE HMI

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- Intuitive and easy-to-use HMI with the same functions as the CFW320 built-in HMI
- Remote installation on panel or close to the operator
- NEMA12 (IP54) protection rating
- Installation up to 3 meters away from the inverter without external power supply
- Kit: remote interface + CRS485 + 3 m cable



FLASH MEMORY MODULE - MMF

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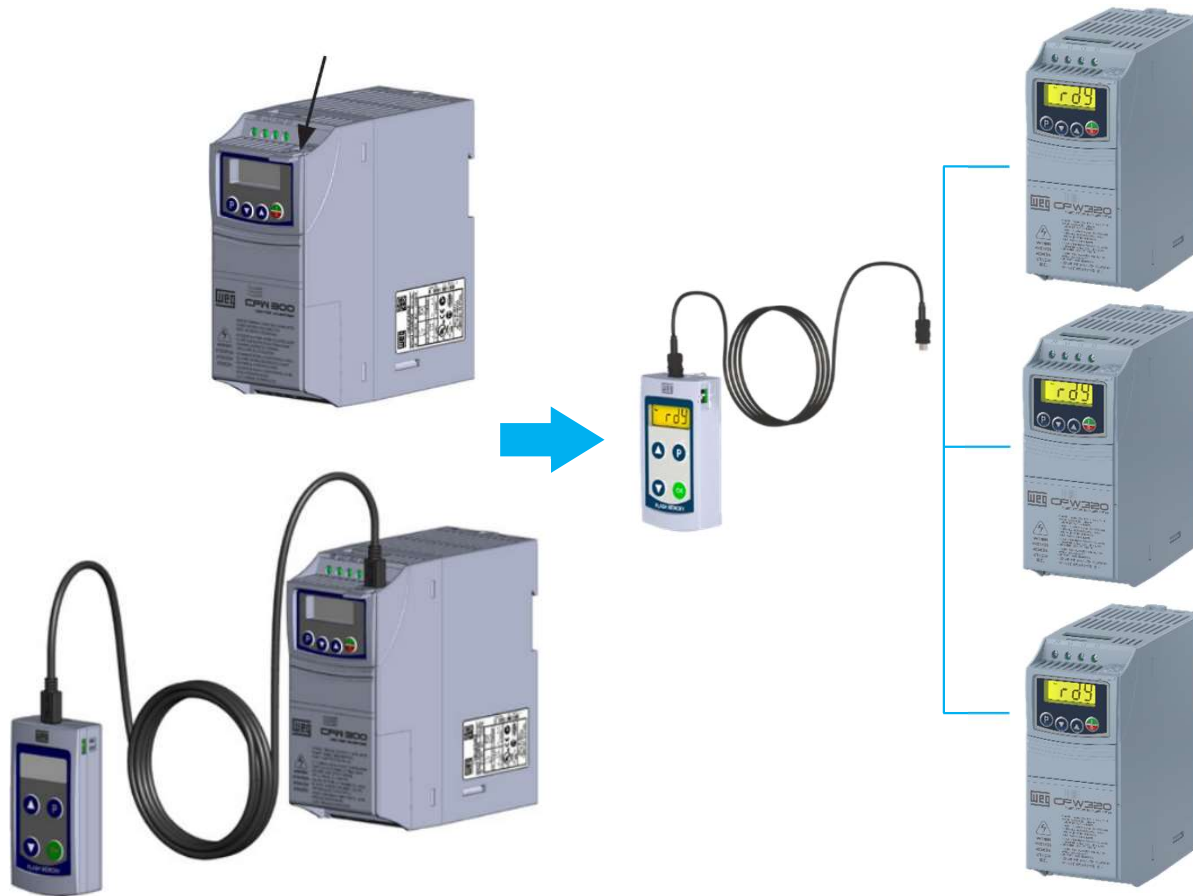
- Provides ability to copy parameters and programming in ladder using the SoftPLC
- Internal battery with back up time for at least 5,000 procedures
- No need to power up the VFD to copy parameters
- Buttons to copy/download parameters between the MMF module and the inverter
- Password to access the user program written on the SoftPLC



FLASH MEMORY MODULE - MMF

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- The **MMF-uDrives** can be used to upload the original parameter settings of the CFW320, including via WPS Software
- It can be used to download the parameter settings of several CFW320
- It downloads the original parameter setting to several CFW320 VSDs turned off



FEED-THROUGH WIRING

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- Convenient and easy to install, replace direct online starters or start-delta starters
- Error-proof Installation
- Quick identification of the wiring in the electrical panel
- Easy maintenance
- Reduction of electrical wiring cost and mounting time



SIDE BY SIDE MOUNTING

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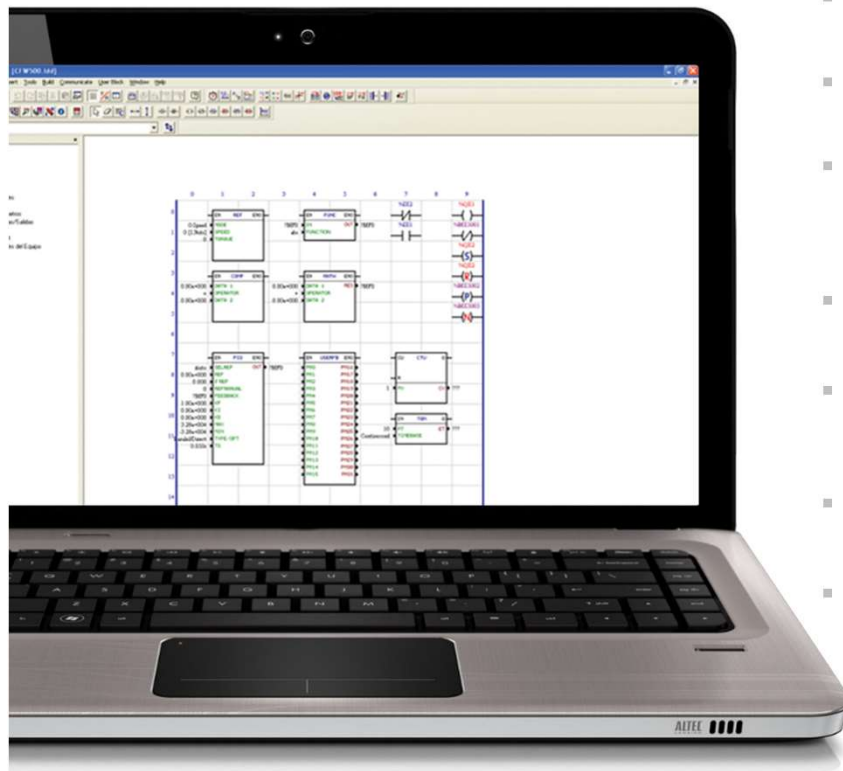
- Zero spacing required between the sides of the drives
- Minimum space on top, bottom, and front
- Significant space savings and potential reduction in panel costs



SOFTPLC FUNCTION

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- PLC function in the VFD, no extra cost or hardware required
- Programmable through FREE WEG WPS software
- A single software application to set the CFW320 parameters and program the SoftPLC
- Quick diagnostics and copy of parameter settings on PC
- Online programming transfer and monitoring via RS232 or RS485 or CUSB plug-in module
- Ladder programming language
- Ability to copy, save, and upload parameters

Free software! Access: www.weg.net





Thank you for your
time and attention.



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