DATA SHEET

◁CYBELEC®
INFRANOR GROUP COMPANY

Numerical control

CybTouch 15PS Win

CybTouch 15PS Win is an outstanding numerical control for press brakes with a new solution all-in-one:

- Semi-compact control with a 15" modern streamlined glass surface full touchscreen and the CNC board mounted on the back of the screen.

- Up to 6 electric axes in analog, CANopen or EtherCAT.

- Interface to all kind of hydraulic systems, I/O and analogue axes thanks to the CybMVA modules placed inside the electrical cabinet.

In addition to all the features available to control simple as well most sophisticated press brakes, hydraulic, electrical and hybrid, CybTouch 15PS Win offers also an open system allowing customization to be up to Industry 4.0 production management requirements.

Main features

For the User

- Modern streamlined glass surface touch screen that can be used with gloves.
- User-friendly HMI thanks to intuitive programming.
- All kinematics available:
  - For X, Xrelatives, Xslave, R, Rslave, and Z axes.
  - For Back and Front multiples gauges.
  - For bending aids.
- Highest precision of bending thanks to sophisticated algorythms.
- Tandem.
- DXF tools import.

- Group management for complex production.
- Preliminary / Final bend.
- Hemming management.
- Running under Windows 10 for multitasking and networking.
- Customizable Industry 4.0.

For the OEM:

- Set up with dedicated wizards (auto-tuning).
- Axis control through CANopen® and EtherCAT® with wide configuration capabilities.
- Interactions with the beam through specific cycles to manage hybrid and electric press brakes.
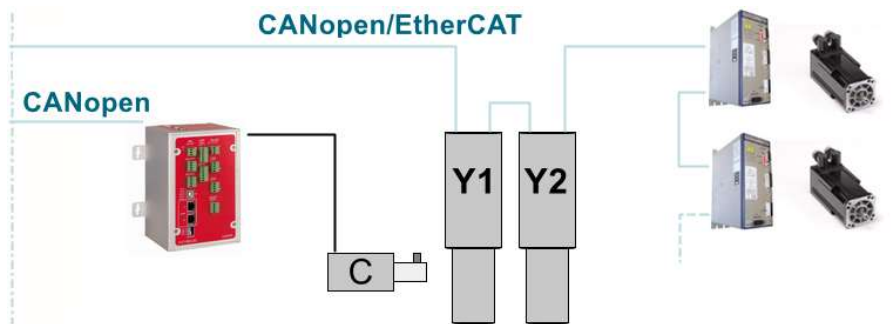
Technical Characteristics

Display	
TFT screen	16 Mio color
Resolution	1366x768
Touch screen	Glass PCAP Multi-touch
Seal	IP44: Display side IP20: Back side
Handle	Included
Emergency button	Included
Operating conditions	Min. 5° Celsius, max. 40° Celsius. If the ambient temperature approaches or exceeds 40° Celsius, it is advisable to install special ventilation, or even air-conditioning. Relative humidity (10 to 85% non-condensing).
EC Directives	IEC 61131-2
Weight	7.2 Kg

| Operating System		Windows 10	
Processor Unit	Model Graphic RAM Cooling	Intel® Atom x5-E3940 Quad-Core @1.6GHz Intel® HD Graphics 500 4 GB DDR3L RAM Passive Heat sink, FAN less	
Mass Storage	Capacity	40 GB CFAST memory card SATA 16 GB eMMC	
Display Interface		LVDS	For the integrated display
		DVI	single-link DVI-D interface for 1x extra display
Communication		LAN	1x Gigabit Ethernet, RJ-45(10/100/1000)
		USB	4x USB (1x USB 3.1, 3x USB 2.0)
			1x USB 2.0 (dedicated to local Touchscreen)
		COM	1x RS-232C (Data flow 115kbps)
		Wi-Fi	USB compatible
		4G-5G	USB compatible
Power Supply (Numerical Control)		+24V$_{dc}$	1.5A min (CN without I/O – X1 connector)
Power Supply (Digital I/Os)		+24V$_{dc}$	4A min
RTC – Calendar Clock		Battery	Lithium CR2032 / 3V @225mA/h
I/O Processor		ARM Cortex M7 series – STM32F765 @216MHz	
Digital Input		6	4mA typ. according to IEC61131-2 type 1 & 3
			Isolation 2kV
			Filtering – debouncing and deglitching (by step of 250μs)
Digital Output		4	0.5A typ. /0.7A max. according to IEC61131-2 type 3
			Isolation 2kV
			Overvoltage and Short circuit protection
			Status – output in fault and no 24V IO power supply
Fieldbus Interface		2 CANopen	1Mbps CAN 2.0 A, RJ-45, CANopen Master/Slave
		1 EtherCAT	100Mbps EtherCAT, RJ-45, Master Stack

Extras	
CANopen Compatible Drives	Baumüller, Delta Electronics, Infranor, INVT, Schneider, etc.
Ethercat Compatible Drives	Delta Electronics, Infranor, Kollmorgen Europe Gmbh, OMRON, Panasonic, Yaskawa Electric, SanyoDenki Co., etc.
Safety Systems Compatibilities	Fiessler, LazerSafe, Nuova Elettronica, Pilz3000, etc.
Angle Measurement Systems	Protractors: IBR, Mitutoyo DMX, Mitutoyo U-wave Real time Systems: DataM LaserCheck, Lazer Safe IRIS+, Vision Component, etc.
Tool Locators	WILA Smart Toll Locator, PB Service, etc.
Languages	Chinese (simplified and traditional), Czech, Dutch, English (reference language), Finnish, French, German, Italian, Polish, Portuguese (Brazil and Portugal), Russian, Slovenian, Spanish, Swedish, Turkish.

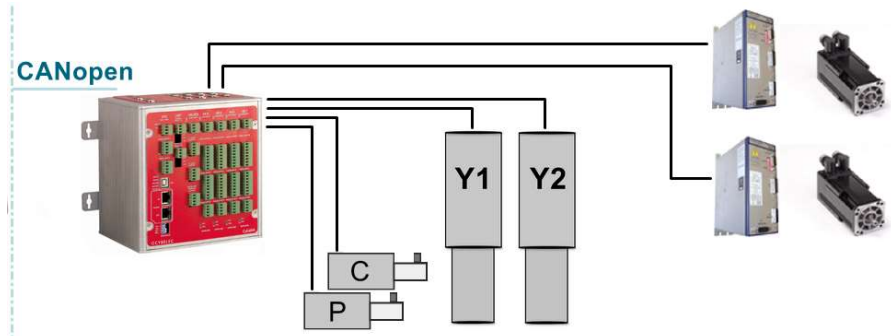## Typical machine configurations – CybTouch 15PS Win and CybMVA modules

FULL DIGITAL axes configuration for hybrid and electric press brakes

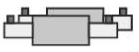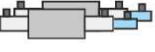### DIGITAL electric axes configuration for hydraulic press brakes
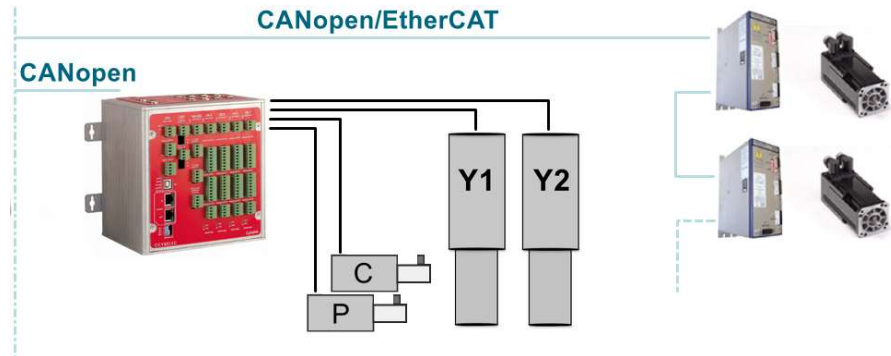
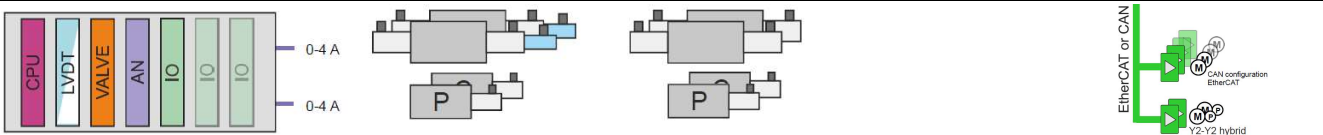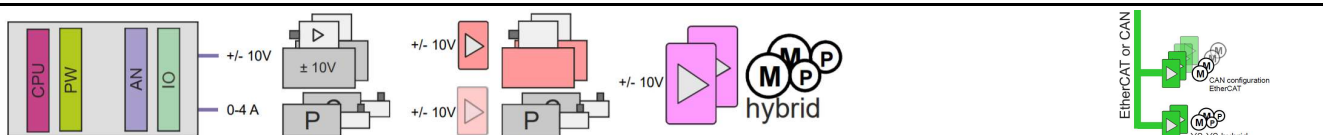
ANALOG electric axes configuration for hydraulic press brakes

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CybMVA modules configurations

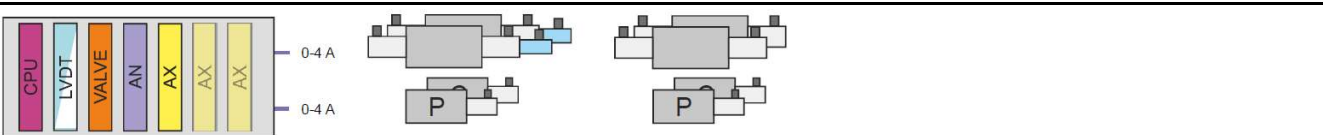For detailed technical characteristics, please refer to the CybMVA datasheet.

	prop. valve without feedback		P	Pressure valve Crowning valve
	prop. valve with feedback		▷	MVP 100/A (valve amplifier)
± 10V	prop. valve with integrated amp. (+/- 10V analog command)		▷ MSV 402/A (servo-valve amplifier)	servo-valve 50-300 mA

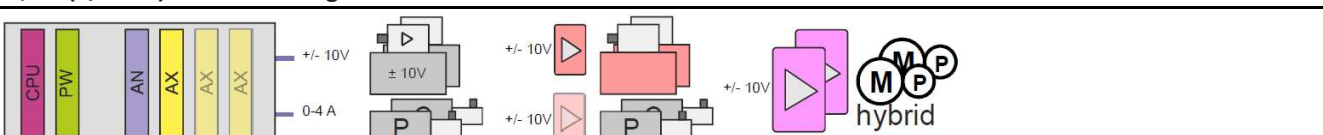## For machines with digital axes (EtherCAT or CANopen)

Y1, Y2 amplifier for proportional valves with and without feedback and I/O

CybMVA	Y1-Y2	Digital In	Digital Out	Analog In	Analog Out	Enc In	Y (4A)	P+C (4A)	LVDT
MVA-FD2	Yes	19	19	4	4	2	4	2	2

Y1, Y2 (+/-10V) with proportional valves with integrated Amplifier/Servo Valves/hybrid machines and I/O

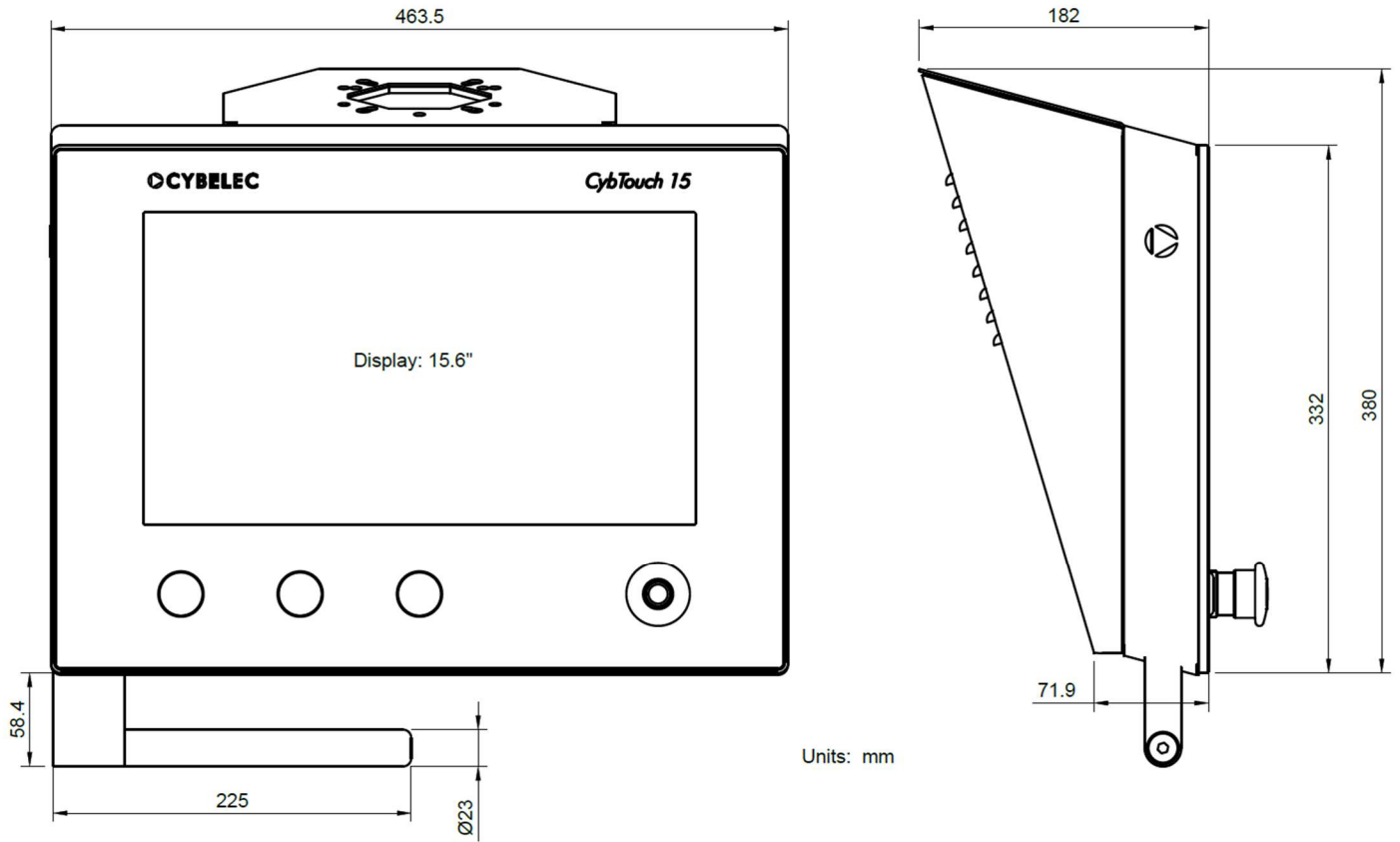| CybMVA	Y1-Y2	Digital In	Digital Out	Analog In	Analog Out	Enc In	Y (4A)	P+C (4A)	LVDT
MVA-AD2	Yes	19	19	4	4	2	-	2	-

For machines with proportional valves and analog axes

Y1, Y2 amplifier for proportional valves with and without feedback and 2-4 analog axes

CybMVA	Axes	Digital In	Digital Out	Analog In	Analog Out	Enc In	Y (4A)	P+C (4A)	LVDT
MVA-FA4	(Y1-Y2 +2)	11*	11*	4	6	4	4	2	2
MVA-FA6	(Y1-Y2 +4)	19	19	4	8	6	4	2	2

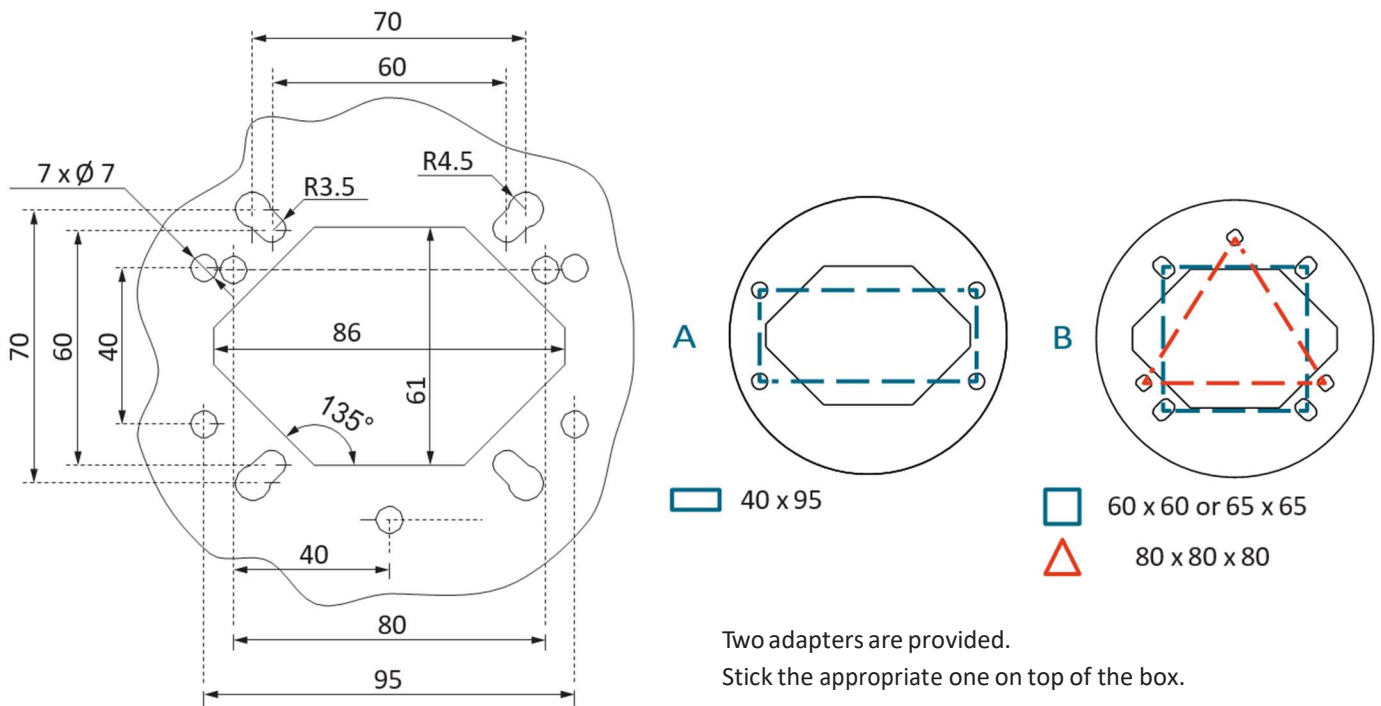## For machines with proportional valves with integrated amplifier / Servo-Valves / Hybrid and analog axes

Y1, Y2 (+/- 10V) and 2-4 Analog axes

CybMVA	Axes	Digital In	Digital Out	Analog In	Analog Out	Enc In	Y (4A)	P+C (4A)	LVDT
MVA-AA4	(Y1-Y2 +2)	11*	11*	4	6	4	-	2	-
MVA-AA6	(Y1-Y2 +4)	19	19	4	8	6	-	2	-

Dimensions

Display: 15.6"

Units: mm

Attachment dimensions

70
60
7 x Ø 7
R3.5
R4.5
70
60
40
86
61
135°
40
80
95

A 40 x 95

B 60 x 60 or 65 x 65
   80 x 80 x 80

Two adapters are provided.
Stick the appropriate one on top of the box.

Dimensions

Panel version

Display: 15.6"

463.5

332

6

81

Units: mm
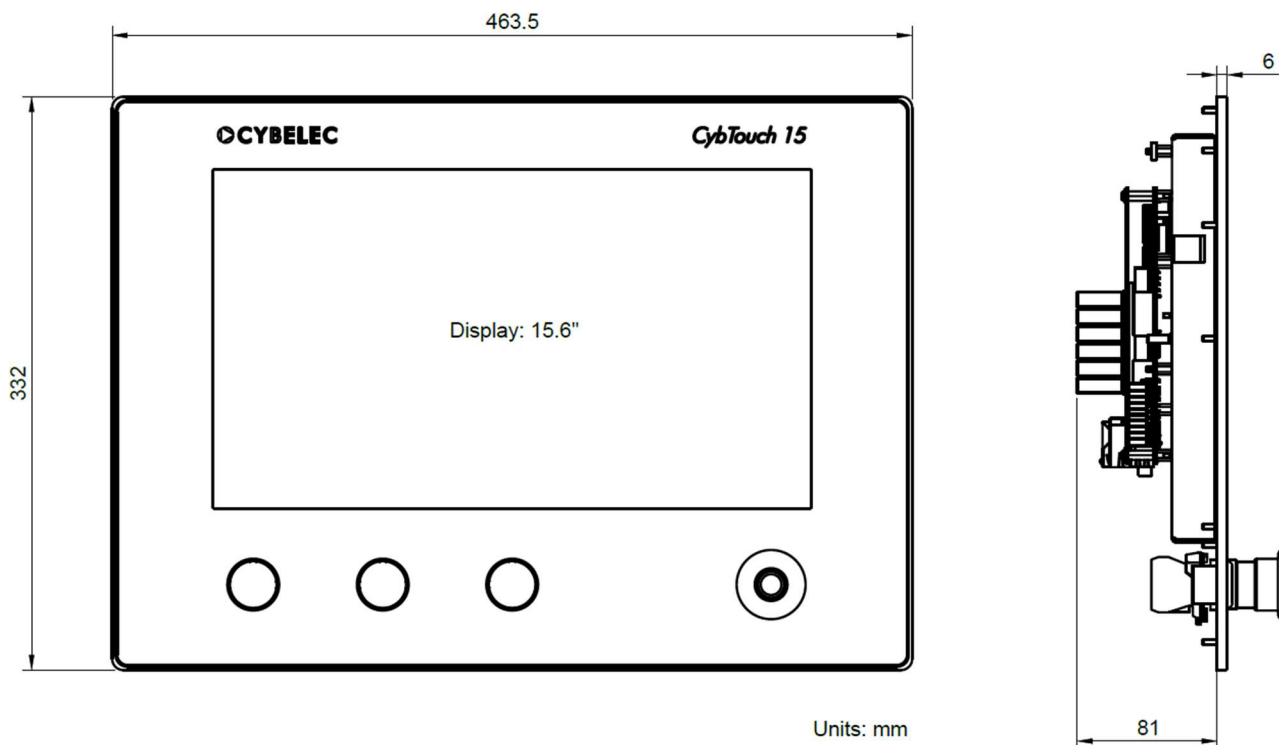
Integrating opening dimensions

TOP

8x Ø4.00

5.25

437

299

5.25

308

241.50

185

56.50

5.25

3.75

50.75

350

400.75

447.50

units: mm

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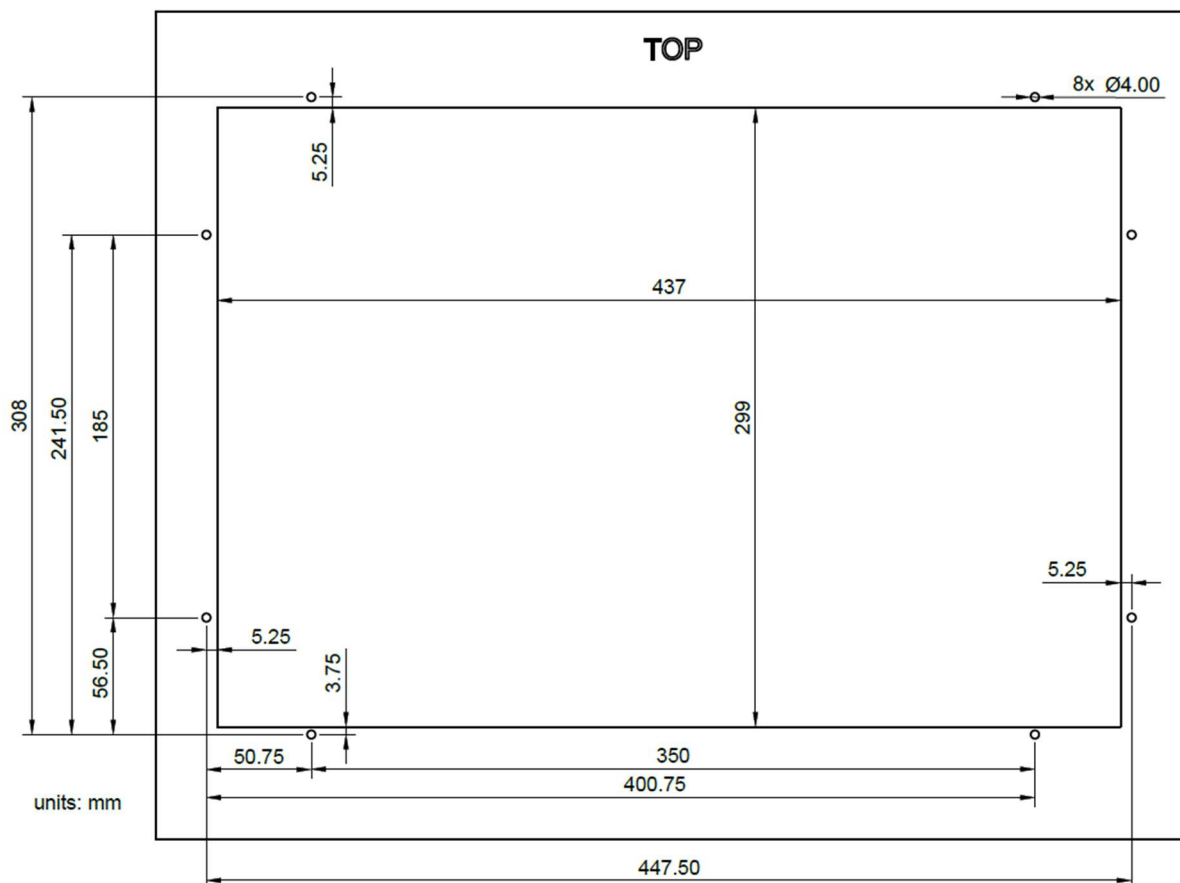
Ordering information

CybTouch 15 PS Win

CBT-15*PS-W/B	T-screen 15", 4 to 6 axes, PS-2D, Windows, housing
CBT-15*PS-W/P	T-screen 15", 4 to 6 axes, PS-2D, Windows, panel
	All controls come with RJ45 wire 7.5m (SFTP CAT 5E) included.

Accessories

S-MSV-402/A1	Servo valve amplifier +/-350mA or +/-50mA
UPS-DP1	UPS system with battery, 24V DC, 3A

Options

OFT-AX	Additional axis license
OFT-TM	Tandem management
OFT-BA	Bending aids and sheet support (require axes licenses)
OFT-SS	Sheet support (require axes licenses)
OFT-ST	Statistics
OFT-I4M	Industry 4.0, statistics, status (MES), communication (MES)
OFT-XC	X Axis calibration (One license per axis)
OPT-160GB	Extended CFast 160GB (replacing the standard CFast)
Included	Protractor Angle
	User cycle encrypted

PC offline software

OFT-VST-2	PC offline software VisiTouch (2D)
OFT-VST-MX	PC offline software VisiTouch MX
OFT-VST-MXIMP	PC offline software VisiTouch MX including Import
OFT-EXP	DXF export license