

# ZmartBox

#ZoningSystem #Plug&Play



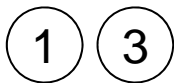
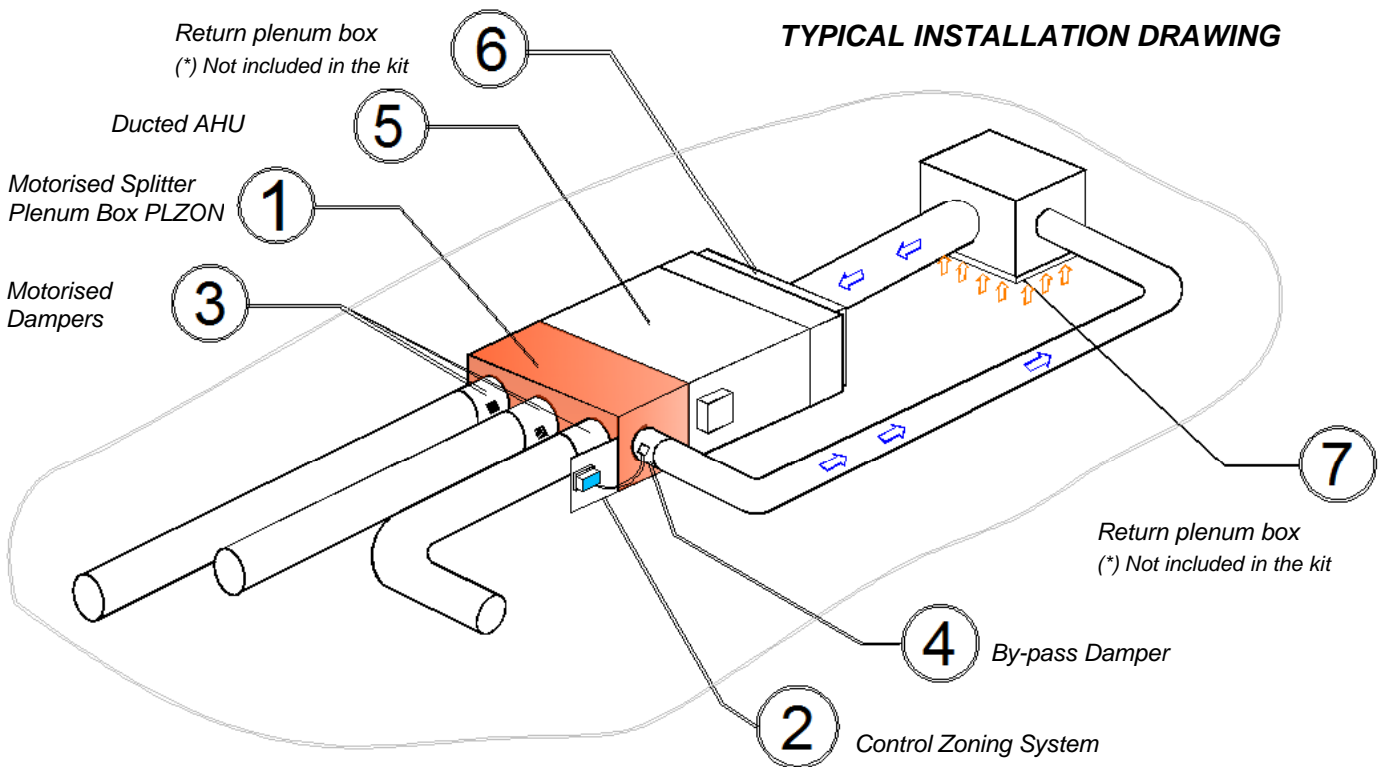
**MADÉL**<sup>®</sup>

We shape the air

The zoning kit **ZmartBox** increases the comfort and reduces energy consumption for residential and commercial A/C systems by allowing temperature to be independently controlled from each zone by a single ducted air handling unit.

**ZmartBox** consists of a kit of control **Zoning System** (central + thermostats + communication interface) and a splitter plenum box (2 to 6 powered outputs + by pass if applicable) compatible with most indoor air conditioning duct type unit (\*).

The **ZmartBox** set comes fully wired, configured and ready to be installed on site. #PlugandPlay.

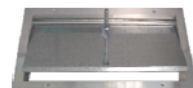


**PLZON: Splitter plenum box and motorised dampers:** Adaptable directly to the indoor ducted AHU. Thermo-acoustically isolated.

(\*) See table of compatible units and maximum number of outputs per machine.



**Control Zoning System:** Includes KSP control panel, thermostat models Chrono-TM and TZ-temp and communication interface with the corresponding indoor unit. Comes fully wired, configured and mounted inside an IP55 waterproof case.



**By-pass damper:** Circular type ZK or rectangular type ZS, or motorised with KBY control, ZC or ZQ type as per customer specification. Sized according to minimum flow of the indoor unit.

**PRICE-LIST: :**

**Zmartbox:** Includes **PLZON** + Control panel **KSP** + Master Thermostat **Crono-TM** + Zone Thermostats **TZ-temp** + **Communication Interface** + By-pass damper **ZS/ZK**

Zmartbox	N° zones $\phi$ 160					N° zones $\phi$ 200				
	2	3	4	5	6	2	3	4	5	6
	eur	eur	eur	eur	eur	eur	eur	eur	eur	eur
1	1100,39	1283,50	-	-	-	1121,09	-	-	-	-
2	1118,55	1301,65	1484,76	-	-	1141,84	1326,08	-	-	-
3	1140,61	1323,72	1506,82	1689,93	-	1167,10	1351,35	1535,59	-	-
4	1167,17	1350,28	1533,38	1716,49	1899,59	1198,10	1382,34	1566,59	1750,83	-

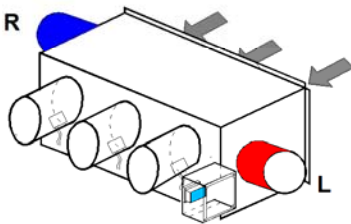
**Zmartbox/KBY:** Includes **PLZON** + Control panel **KSP** + Master Thermostat **Crono-TM** + Zone Thermostats **TZ-temp** + **Communication Interface** + constant pressure kit **KBY+ZC/ZQ**

Zmartbox/KBY	N° zones $\phi$ 160					N° zones $\phi$ 200				
	2	3	4	5	6	2	3	4	5	6
	eur	eur	eur	eur	eur	eur	eur	eur	eur	eur
1	1288,08	1471,19	-	-	-	1308,78	-	-	-	-
2	1306,24	1489,34	1672,45	-	-	1329,53	1513,77	-	-	-
3	1328,30	1511,41	1694,51	1877,62	-	1354,79	1539,04	1723,28	-	-
4	1354,86	1537,97	1721,07	1904,18	2087,28	1385,79	1570,03	1754,28	1938,52	-

**Ordering information :**

**ZmartBox / Size / N°Zones/ diam / BP / SIDE + Machine model**

**ZmartBox/ KBY / Size / N°Zones/ diam / BP / SIDE + Machine model**



**Size.** Refer to the above tables. 1 – 2 –3 -4

**NZ.** Number of zones to be controlled (From 2 to 5)

**Diam:** Diameter of dampers (160 or 200 mm)

**BP:** By-pass damper type:

**ZK:** Circular. **ZS:** Rectangular. **ZC:** Motorised Circular. **ZQ:** Motorised Rectangular.

**SIDE:** Output side of the by-pass and the control box. **L: Left. R: Right. (see drawing)**

**Machine Model:** Enter the model of the indoor unit to adapt to the set.

**COMPATIBLE UNITS :** Consult for other models or configurations.

Model	Size	N° zones $\phi$ 160	N° zones $\phi$ 200
<b>Mitsubishi Electric</b>			
SEZ-KD25VA(L)	1	2 ... 3	2 (*)
SEZ-KD 35 / 50 VA(L)	2	2 ... 4	2 ... 3 (*)
SEZ-KD 60 / 71 VA(L)	3	2 ... 5	2 ... 4 (*)
PEAD-RP35-50JA / JAL	2	2 ... 4	2 ... 3 (*)
PEAD-RP60-71JA/ JAL	3	2 ... 5	2 ... 4 (*)
PEAD-RP 100-125JA	4	2 ... 6	2 ... 5 (*)
PEAD-RP140JA	4	2 ... 6	2 ... 5 (*)
PEFY-P20-36 VMA-E	1	2 ... 3	2 (*)
PEFY-P40-50VMA-E	2	2 ... 4	2 ... 3 (*)
PEFY-P63-80VMA-E	3	2 ... 5	2 ... 4 (*)
PEFY-P100-125VMA-E	4	2 ... 6	2 ... 5 (*)
PEAD-RP35-50EA	3	2 ... 4	2 ... 3 (*)
PEAD-RP60EA	3	2 ... 4	2 ... 4 (*)
PEAD-RP60-71GA	3	2 ... 4	2 ... 4 (*)
<b>DAIKIN</b>			
FBQ 35/50 B/C	1	2	2
FBQ 60/71 B/C	2	2 ... 3	2 ... 3
FBQ 100/125 B/C	3	2 ... 4	2 ... 4
<b>FUJITSU-GENERAL</b>			
ACY 35/40 UIA/UIB-LL	1	2 ... 3	2 (*)
ACG 12/15/18 UIA/UIB-LL	1	2 ... 3	2 (*)
ACY 50 UIA/UIB-LL	2	2 ... 4	2 ... 3 (*)
ACG 18 UIA/UIB-LL	2	2 ... 4	2 ... 3 (*)
ACY 71/80/100/125 UIA/UIB-LL	3	2 ... 4	2 ... 4
ACG 24/30/36/45 UIA/UIB-LL	3	2 ... 4	2 ... 4

Model	Size	N° zones $\phi$ 160	N° zones $\phi$ 200
<b>Mitsubishi Heavy Industries</b>			
FDUH 22/36 KXE6	1	2	consult
FDUM 22/28/56 KXE6	1	2 ... 3	2
FDUM 71/91 KXE6	2	2 ... 4	2 ... 3
FDUM 112/140 KXE6	4	2 ... 5	2 ... 4
FDU 71 VD	3	2 ... 4	2 ... 3
FDU 100/125/140 VD	4	2 ... 6	2 ... 5
FDU 71 KXE6	2	2 ... 4	2 ... 3
FDU 90/140 KXE6	4	2 ... 6	2 ... 5
FDU 224/280 KXE6	4	2 ... 6	2 ... 5
<b>Panasonic</b>			
S-36/45/50 PF1E5	1	2 ... 3	2 (*)
S-60/71 PF1E5	2	2 ... 4	2 ... 3 (*)
S-100/125/140 PF1E5	3	2 ... 5	2 ... 4 (*)
S-22/28/36/45/56 MF2E5	1	2 ... 3	2 (*)
S-60/73/90 MF2E5	2	2 ... 4	2 ... 3 (*)
S-106/140/160MF2E5	3	2 ... 5	2 ... 4 (*)
S-36/45/50 PN1E5	2	2 ... 3	2 (*)
S-60/71 PN1E5	3	2 ... 4	2 ... 3 (*)
S-100/125/140 PN1E5	4	2 ... 5	2 ... 4 (*)
<b>Toshiba</b>			
MMD-AP 54/74/94/124/154/184 SPH-E	2	2 ... 4	2 ... 3 (*)
MMD-AP 244/274 SPH-E	3	2 ... 5	2 ... 4 (*)
RAV-SM 40/45/56 6BT	1	2 ... 3	2 (*)
RAV-SM 80 6BT	2	2 ... 4	2 ... 3 (*)
RAV-SM 110/140/160 6BT	4	2 ... 6	2 ... 5 (*)

(\*) Height of PLZON higher than the indoor unit. Check available space.



**Custom made...** devices sold separately. The connection and configuration are not include.

**PLZON:** Plenum to adapt to indoor ducted units of low silhouette. Includes plenum box + motorised circular dampers ZC + By-pass dampers ZK/ZS. See table for compatible units in previous page.

PLZON	N° zones $\phi 160$					N° zones $\phi 200$					
	Size	2	3	4	5	6	2	3	4	5	6
		eur	eur	eur	eur	eur	eur	eur	eur	eur	eur
1		375,22	449,93	-	-	-	395,92	-	-	-	-
2		388,15	462,87	537,58	-	-	411,44	487,30	-	-	-
3		404,17	478,88	553,60	-	-	430,66	506,52	582,37	-	-
4		426,34	501,05	575,77	650,48	725,19	457,27	533,12	608,97	684,83	-



**ZONING SYSTEM:** Set of control panel+ thermostats of **Zoning System** for the independent control from each zone.

KIT	2	3	4	5	6	CIP
	eur	eur	eur	eur	eur	
MODEL						eur
KIT KCA	323,12	395,95	468,79	541,62	614,46	18,42
KIT KSP	442,00	550,39	658,79	767,18	875,57	18,42
KIT KARESS	497,50	634,44	771,37	908,30	1045,24	18,42

**KSP**



**KCA**



**CRONO & KARESS**



**KIT KCA** Wired control panel **KCA** + Master Thermostat **Crono-TMA** + Zone Thermostats **TZA-Temp**

**KIT KSP** Control panel via radio **KSP** + Master Thermostat **Crono-TM** + Zone Thermostats **TZ-Temp**

**KIT KARESS** Control panel via radio **KSP** + Tactile Master Thermostat **KARESS-TM** + Tactile Zone Thermostats **KARESS-TZ**.

**INTERFACE:** Communication interface between KSP and KCA control panels and ducted AHU's. The bidirectional MODBUS communication allows to optimize the operation of both the zoning system and the air handling unit, allowing an improve of the comfort and of the power consumption. Consult the compatibility with units of previous years.

INTERFACE	eur
MITBOX	102,70
DAIKIBOX	133,27
FUJIBOX	138,55
HEAVYBOX	138,55
PANABOX	177,63
TOSHIBOX	177,63



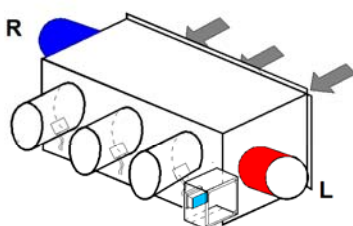
**KBY:** Pressure control module (range 50 to 300 Pa) for constant pressure regulation in the discharge plenum. Calibration of pressure by turning a knob. Possible action on EC type fans. Requires bypass damper Motorized ZC.

PRESSURE CONTROL	eur
KBY	112,67
ZC 160	72,67
ZC 200	73,83
ZC 250	75,03



**Ordering information:**

**PLZON** / Size / N°Zones/ diam / BP / SIDE / Machine Model



**Size.** Refer to the above tables. 1 – 2 –3 -4

**NZ.** Number of zones to be controlled (From 2 to 5)

**Diam:** Diameter of dampers (160 or 200 mm)

**BP:** By-pass damper type: **ZK:** Circular. **ZS:** Rectangular.

**SIDE:** Output side of the by-pass and the control box. **L: Left. R: Right. (see drawing)**

**Machine Model:** Enter the model of the indoor unit to adapt to the set.

**ZONING SYSTEM** / kit \_\_\_\_ / N° of zones

**INTERFACE** / \_\_\_\_ Box (optional) **Interface:** Indicate the interface model (optional).

**KBY** / \_\_\_\_ / ZC diam **KBY+ZC:** Indicate for motorised pressure control (optional).