EN

EP.V.35906.01 | 02/2024

asecos®

GAP LINE

USER MANUAL

Hazardous Materials Work Stations

GAP
LINE

Hazardous materials work stations GAP

GAP.110.090.060
GAP.110.120.060
GAP.110.150.060
GAP.110.180.060
GAP.110.210.060
GAP.110.240.060

GAP.110.090
GAP.110.120
GAP.110.150
GAP.110.180
GAP.110.210
GAP.110.240

GAP.140.090.060
GAP.140.120.060
GAP.140.150.060
GAP.140.180.060
GAP.140.210.060
GAP.140.240.060

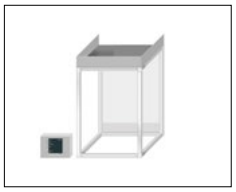
GAP.140.090
GAP.140.120
GAP.140.150
GAP.140.180
GAP.140.210

GAP.140.090.EC
GAP.140.120.EC
GAP.140.150.EC
GAP.140.180.EC

Hazardous materials work stations GAP – Weighing work station

GAP.140.090.WA
GAP.140.120.WA

Hazardous materials work stations GAP – EX-LINE



GAP.140.090.EX
GAP.140.120.EX
GAP.140.180.EX

EN

OPERATING INSTRUCTIONS

Dear customer,

These operating instructions are for practical use and should be available to the user where the hazardous material workplace is to be used.

Please keep these operating instructions close to the unit. An assured, faultless functioning of the hazardous material workplace is only ensured when these instructions are followed. Do take note of the safety information.

Many thanks.

Your asecos team

1. NOTES ▪ GUIDELINES ▪ GUARANTEE

1.1. GENERAL SAFETY NOTES

- Observe the notes in these operating instructions!
- Observe applicable statutes and regulations, and the notes in these operating instructions, when handling hazardous materials
- Observe accident prevention regulations and workplace ordinance
- **Ensure that the necessary safety checks are only carried out by authorised staff using original spare parts**
- Only use the hazardous material workplace in a proper condition
- Make sure that there are no air currents above 0.2 m/s when selecting the place of erection as this can affect the functional apability.
- The users are to be trained on handling of the hazardous material workplace
- The required exhaust air flow is to be provided on site
- Observe the maximum weight with which the cabin may be loaded
- Any hazardous materials that escape must immediately be collected and removed
- Please check the material resistance of all surfaces for the use of aggressive materials.
- The instructions of the supervisory engineering department must be followed.
- Elektroinstallationen bzw. Anschlussarbeiten an elektrische Anlagen und Betriebsmittel dürfen nur durch eine Elektrofachkraft vorgenommen werden.

1.2. GUARANTEE

The warranty for this product is agreed between you (the customer) and your specialist dealer (the seller). asecos, as the manufacturer, provides a warranty of 24 months from the date of delivery for the products listed in the operating instructions. As a safety device, all models are subject to an annual inspection by specialist personnel authorised by the manufacturer. All device connections, including electrical and media connections, must be made exclusively at the transfer points provided by asecos. Failure to do so will invalidate the customer's warranty claim against the manufacturer.

1.3. DETAILS

Development: asecos GmbH Sicherheit und Umweltschutz, D-63584 Gründau.

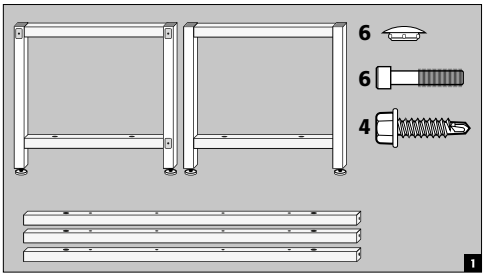
Serial No.: inside the hazardous substance workplace on the air duct

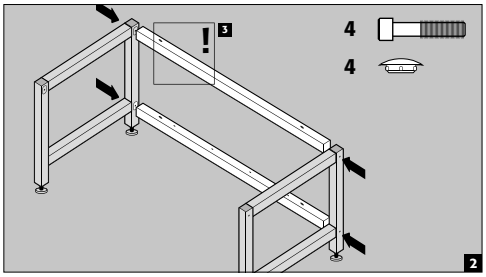
Hazardous material workplace GAP
Complete capture of hazardous vapours, gases or suspended solids at the place where they emerge or where they are created before they can have effects that are damaging to health or to the environment (see hazardous materialsregulations, workplace regulations and laboratory guidelines).

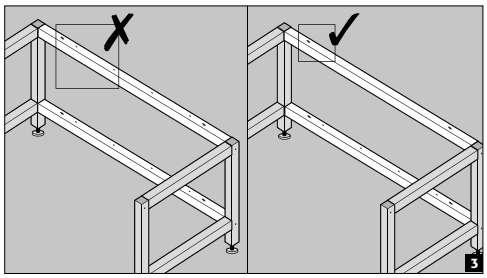
Hazardous material workplace GAP
Complete capture of hazardous vapours, gases or suspended solids at the place where they emerge or where they are created within explosive atmospheres of zone 1, before they can have effects that are damaging to health or to the environment (see hazardous materials regulations, workplace regulations and laboratory guidelines).

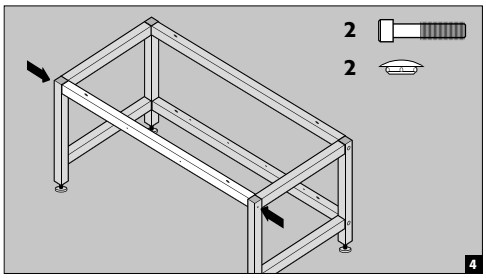
2. ERECTION ▪ COMMISSIONING

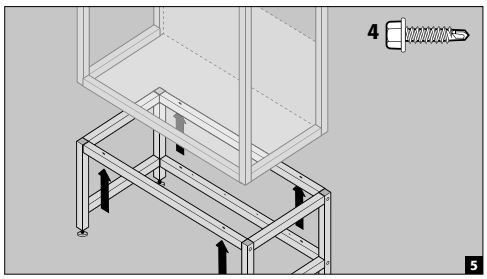
2.1. ASSEMBLY OF THE SUPPORT FRAME (WIDTH UP TO 1800 MM)



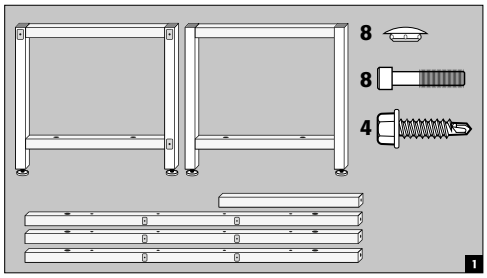


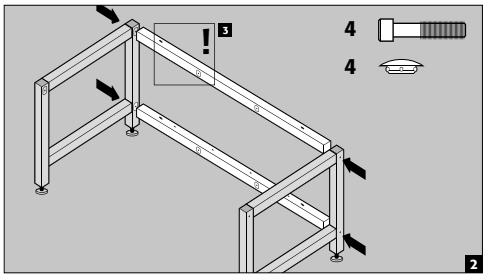


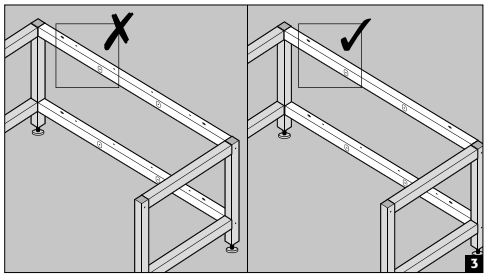


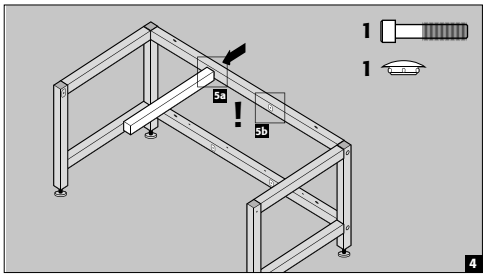


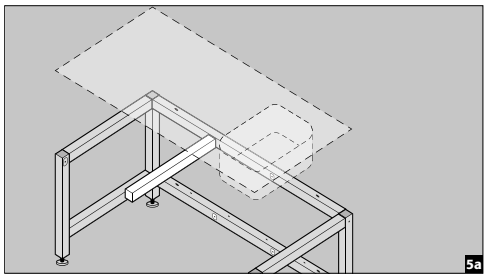
2.2. ASSEMBLY OF THE SUPPORT FRAME (WIDTH 1800 MM)

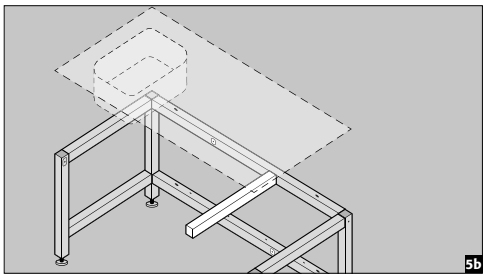


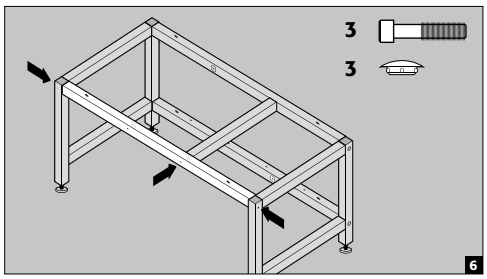


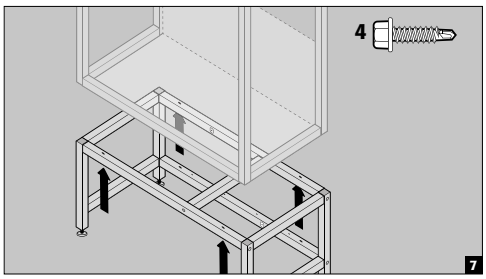




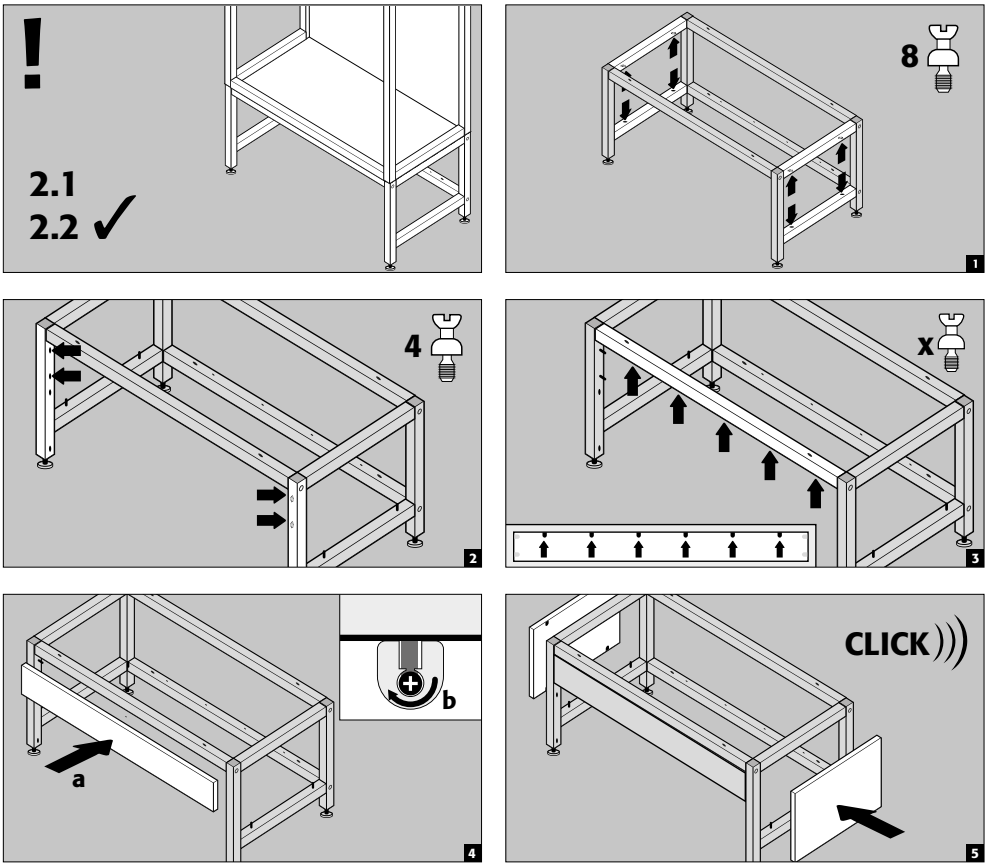




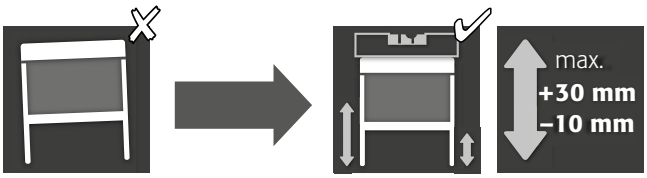




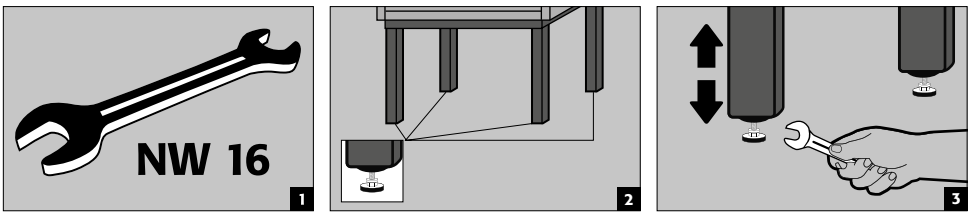
2.3. ASSEMBLY OF FRONT AND SIDE PANEL



2.4. ALIGNMENT OF THE WORKPLACE



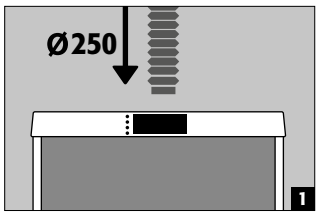
with support frame (optional)



2.5. COMMISSIONING

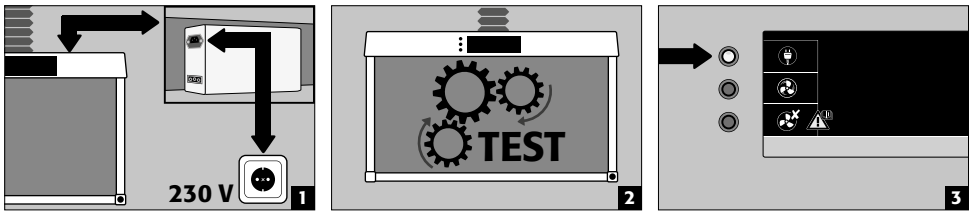
Testing before setup:

- Adequate ground loading capacity.
- Point loads on the 4 supports of the frame (technical data)!
- Make on site extraction air connection

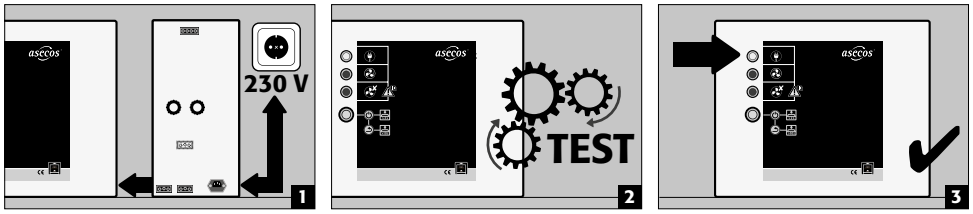


NOTE
The PVC reducing spigot for reducing from 250 mm to 200 mm is available separately (order number 41046 EP.K.35344). Please contact the service department at service@asecos.com

GAP /Weighing work station

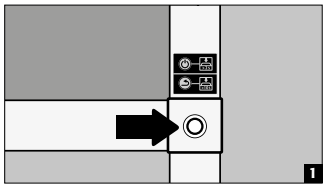


GAP EX-LINE

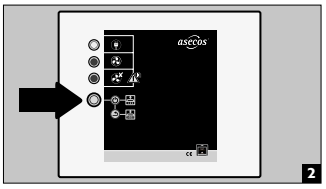


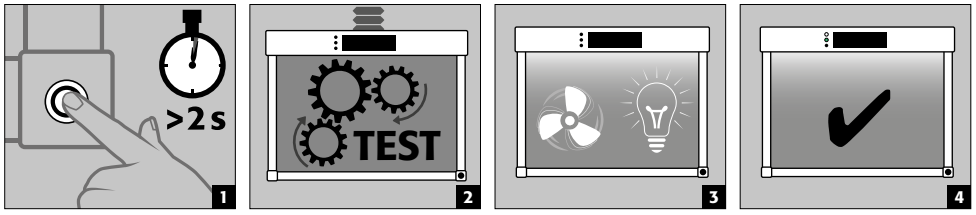
2.6. TURN ON AND TURN OFF

GAP /Weighing work station



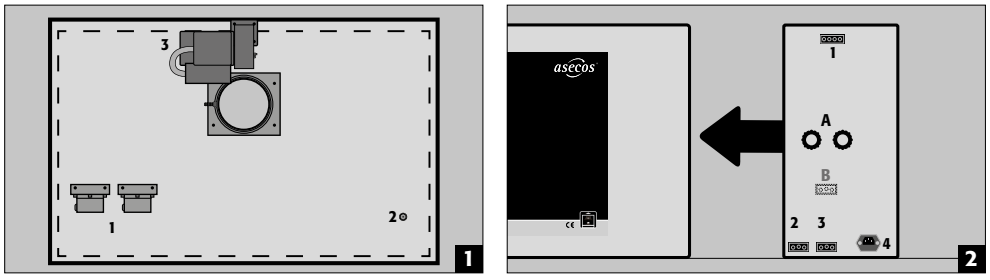
GAP EX-LINE





2.7. INSTALLATION OF THE MONITORING ELECTRONICS

ATTENTION
The monitoring electronics unit **is to be installed outside potentially explosive atmospheres only**
All work **must be** carried out by a qualified electrician!



- Connect all components on the headboard of the hazardous materials workplace **[Fig 1]** with the appropriate connection on the control unit of the monitoring electronics **[Fig 2]**

Slot 1 - Differential pressure switch
This pressure switch must be connected electrically to the external electronics by connecting the blue cable to the monitoring electronics unit

Slot 2 - Lighting
Connect the other ends to the explosion-proof lamp (black cable).

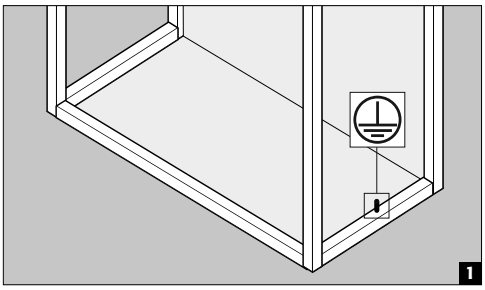
Slot 3 - Fan
Please, make a connection between the fan and the suitable slot on the monitoring electronics unit using the black cable.

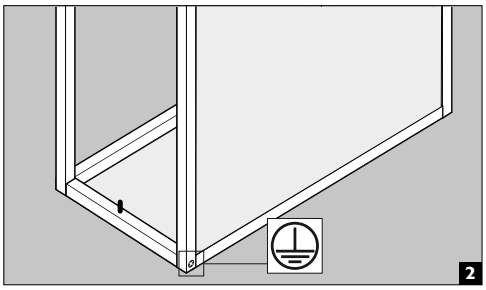
Slot 4 - Mains connection
Insert the mains cable into an available 230 V mains socket
Optional connections

Connection A - Potential-free switching contact
To use the switching contact, e.g. to control on-site exhaust air systems, please refer to point 3.

Connection B - Potential-free alarm contact
If available, use the supplied plug and please note point 3.

2.8. EARTHING POSSIBILITY





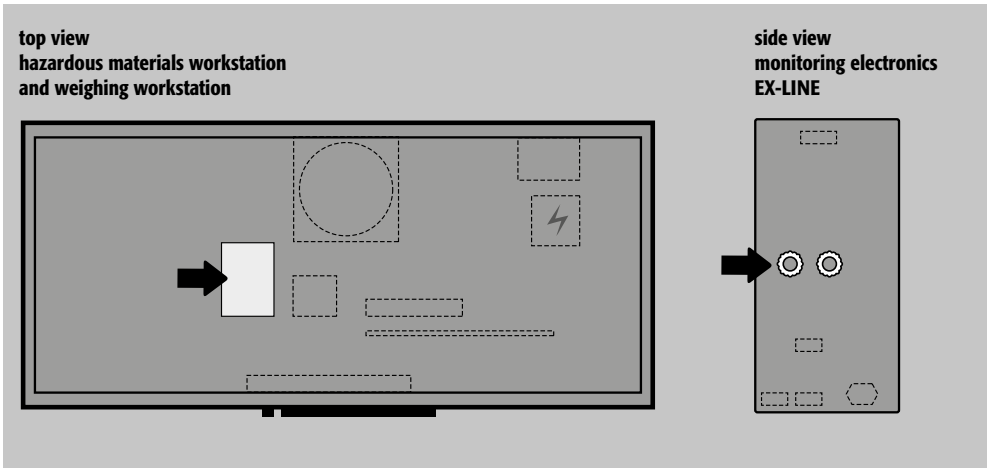
3. POTENTIAL-FREE SWITCHING CONTACT / POTENTIAL-FREE ALARM CONTACT (OPTIONAL)

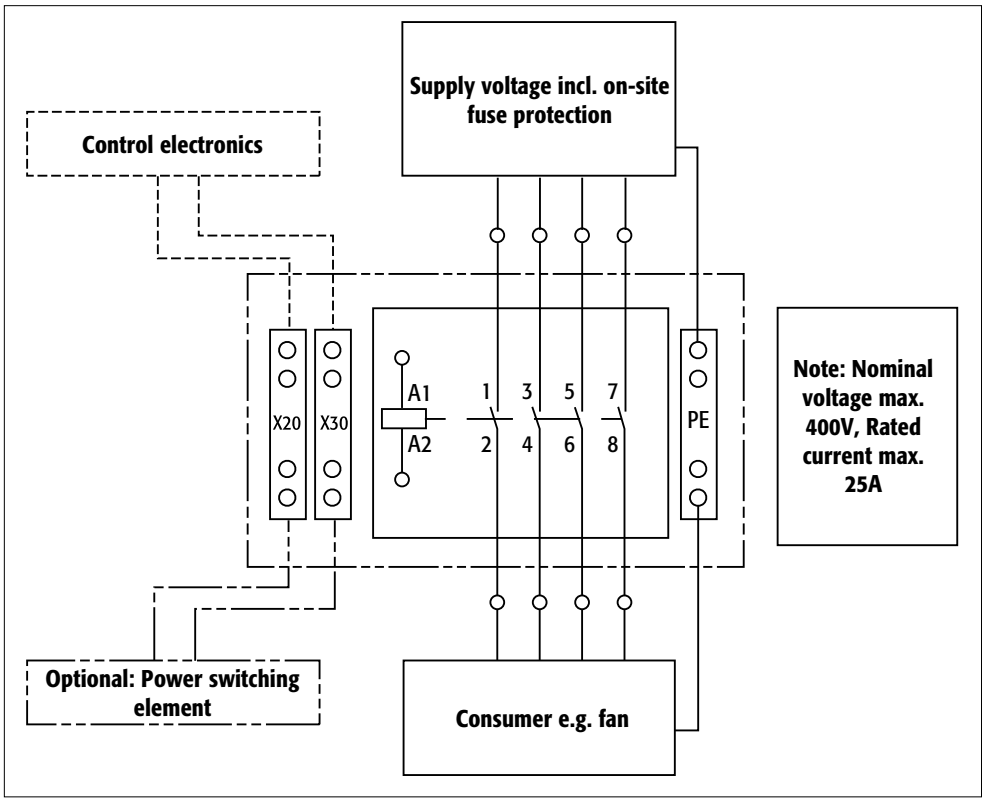
3.1. CONNECTION OF THE POTENTIAL-FREE SWITCHING CONTACT

Each hazardous substance workstation includes a potential-free switching contact for connecting and controlling on-site consumers such as exhaust air systems, "Operation" indicator light..

Technical data
- Rated voltage: max. 400V
- Rated current: max. 25A

Switching contact position for operation

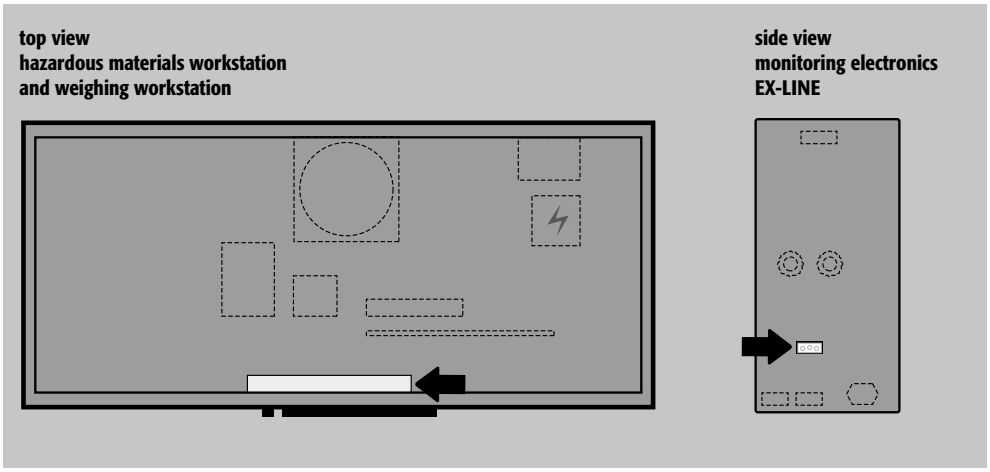




3.2. CONNECTION OF THE POTENTIAL-FREE ALARM CONTACT (OPTIONAL)

The alarm contact is used to indicate a fault in the device. The contact is designed for a maximum direct voltage of DC 30 V or an alternating voltage of AC 230 V. The maximum current carrying capacity is 10 A.

Alarm contact position (optional)



NOTES

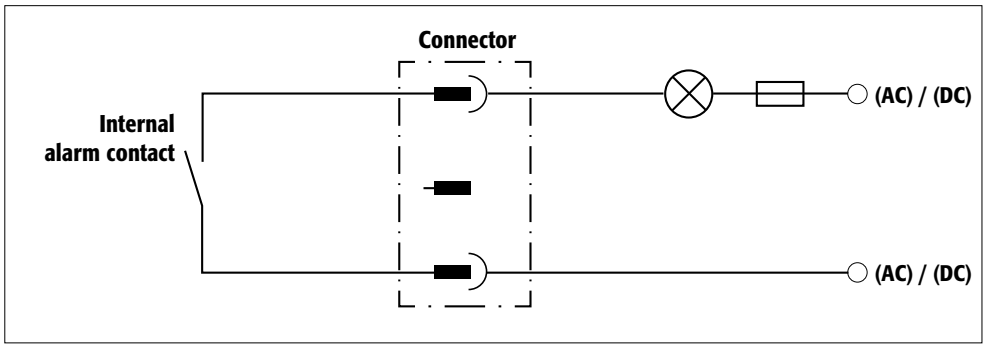
Use outside the above parameters is not permitted for safety reasons.

The alarm contact must not be confused with other contacts. The installation plug of the corresponding contact is labelled for this purpose.

If the labelling of the alarm contact is not recognisable, it must not be connected or operated. The asecos GmbH service department must be notified in order to replace the labelling.

Only the supplied counterpart to the installation plug (on the device) is to be used for connection.

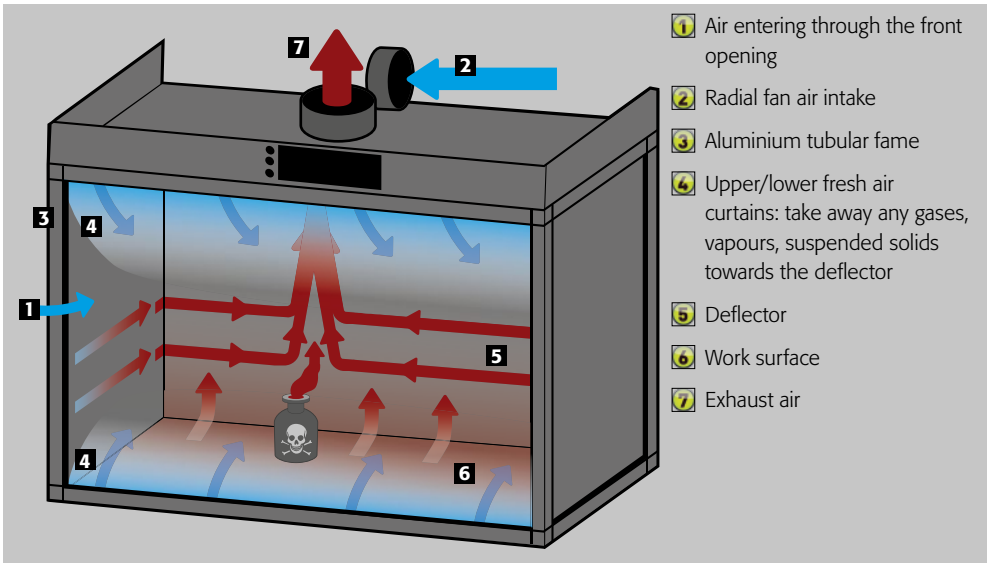
The switching contact / alarm contact must be protected on site with a fuse (see illustration), which limits the current to the maximum switching current specified above.



4. FUNCTION

4.1. MODE OF OPERATION

CAUTION
Avoid negative infl uences on the fl ow behaviour in the hazardous material workplace due to:
› Incorrect operation (i.e. no fast movements > 1m/s)
› more aspects:

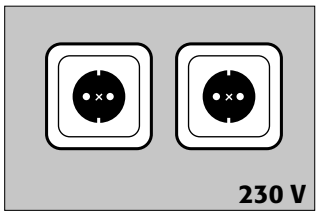


1. Air entering through the front opening
2. Radial fan air intake
3. Aluminium tubular fame
4. Upper/lower fresh air curtains: take away any gases, vapours, suspended solids towards the deflector
5. Deflector
6. Work surface
7. Exhaust air

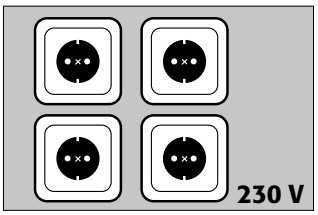
4.2. OPTIONAL MEDIA DUCT/MEDIA SOCKET

Earthed sockets

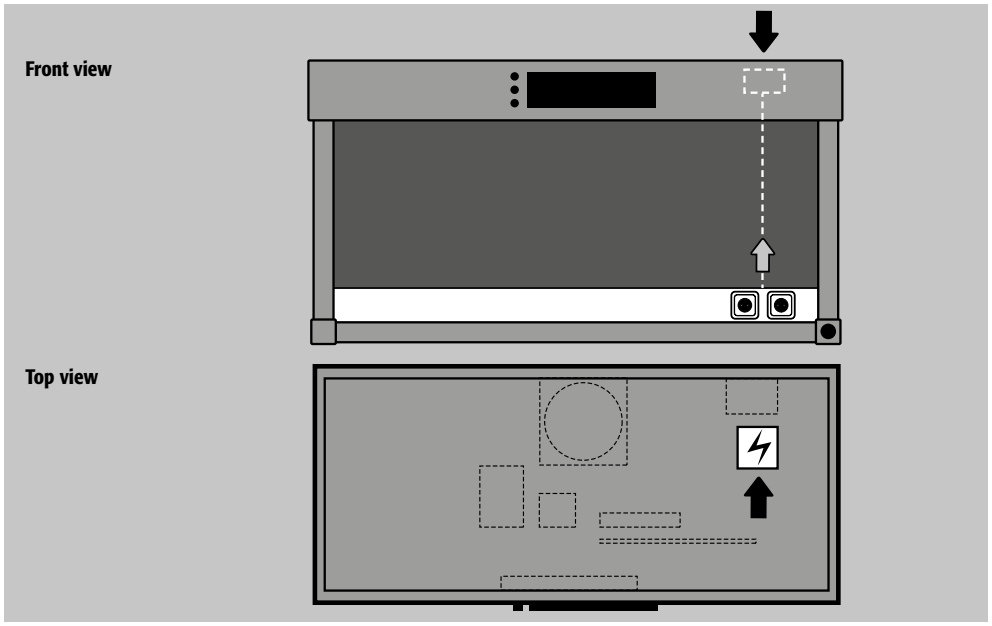
Width 90—150 cm



Width 180—240 cm

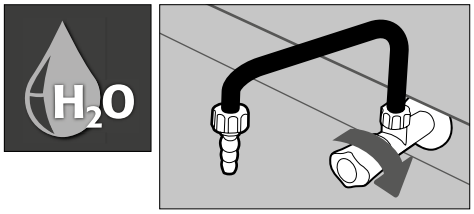


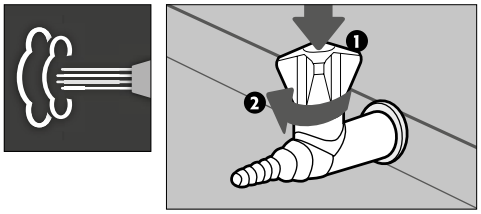
Position terminal box



NOTE:
For on-site connection and fuse protection, please observe the respective country standard.

Media supply





5. VENTILATION ADJUSTMENT • MONITORING

5.1. VENTILATION

PLEASE NOTE!
factory setting of the inlet air flow, recommended exhaust air flows and pressure losses: see technical data!

The specified values don't apply if another setting is selected!

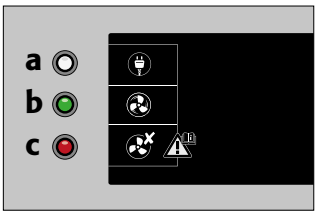
- Efficient, secure retention of the pollutants at the hazardous material workplace is achieved through an optimum combination of inlet and exhaust air.
- The retention capacity of the hazardous material workplace depends on the inlet air speeds of the device.
- An increase in inlet air fl ow is only possible with an increase in exhaust air fl ow, otherwise any pollutants may be forced out of the hazardous material workplace.
- **The appliance has been optimised at the factory.**
- In the case of hazardous substance workplaces with more than one exhaust air spigot, each exhaust air spigot

is monitored separately. It is therefore necessary for each spigot to be vented evenly.

- A delay of 20 seconds is set at the factory for exhaust air monitoring so that the on-site exhaust air system can build up the necessary negative pressure before the test, even if the exhaust air line is longer.

5.2. MONITORING

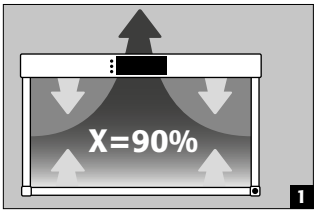
Monitoring electronics

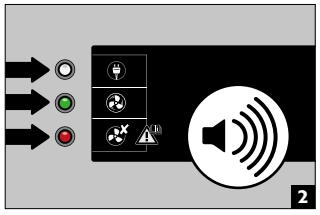


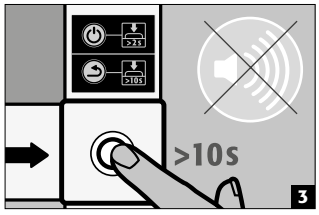
a Power supply OK – illuminates permanently
b Ventilation OK – illuminates when ventilation is turned on
c Ventilation ERROR – illuminates in case of malfunction

- Pressure measurement in exhaust and inlet air duct with integrated pressure cell and set point (minimum nominal air flows X)

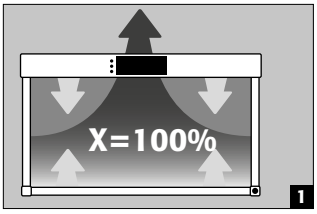
Deviation from nominal values X

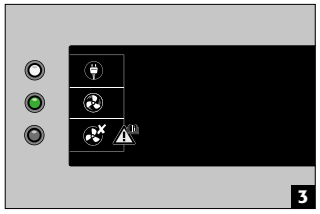






Nominal values X are reached

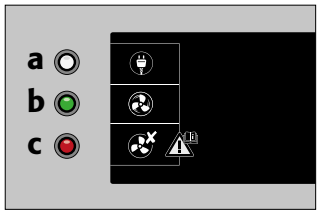




NOTE for GAP EX-LINE models
The button for resetting the alarm is located on the monitoring electronics.

POWER FAILURE:
Operation of the monitoring electronics unit with built-in even battery even in the case of a power failure.

6. MALFUNCTIONS · ACTIONS



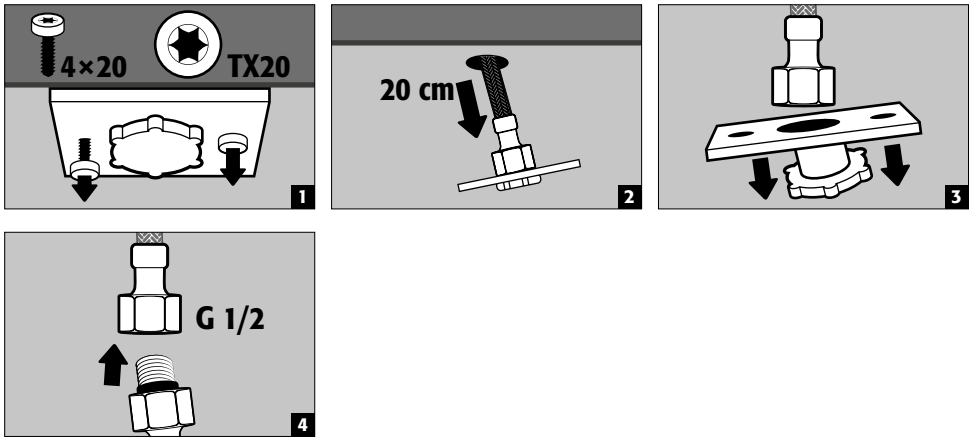
MALFUNCTION	ACTION
the mains plug is inserted **a** does not illuminate	Check if there is power on the socket in use
the On/Off switch had been activated **b** does not illuminate	LED defective (replace) or defect in the electronics
The light does not switch on after the self-test.	Contact Service
c illuminates during operation of the workplace	Check the pressure difference on the on-site exhaust air pipe (see point 5) or defect in the integrated supply air fan.
3 short beeps sound every 60 seconds **c** shortly lluminates every 20 seconds	Power failure

CAUTION
If your hazardous material workplace has the above or other defects, then please contact your dealer.

7. CONNECTION TO A MEDIA SUPPLY

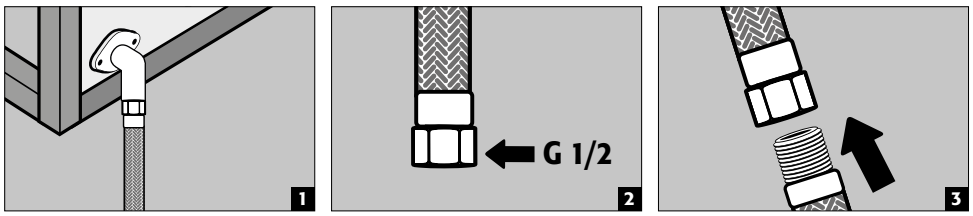
7.1. CONNECTION IN THE MEDIA DUCT

Below worktop



7.2. CONNECTION IN THE MEDIA SOCKET

On backpanel



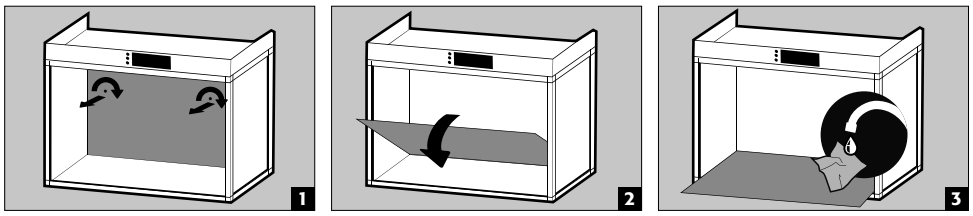
8. FUNCTIONAL CHECK ▪ MAINTENANCE ▪ CARE

Continuous functional testing of the hazardous material workplace
- during operation through the integrated ventilation monitoring unit (item 4)

Annual maintenance and functional test
- by specialised staff authorised by asecos

Cleaning
- with normal mild household cleaners
- escaped fluids should be collected /removed immediately

Cleaning of deflector



CONTACT:
In the case of defects or complaints about our products (within and also after the warranty period), and for requesting safety checks or taking out a service contract, please contact our service hotline on:
Tel: +44 1785 22 70-90 | info@asecos.co.uk (for great Britain and Ireland)
Tel: +49 1805 92 20 92 | service@asecos.com (international)

9. DOKUMENTATION GAP EX-LINE KOMPONENTEN

NOTE
All documents relating to the components installed in the GAP EX-LINE can be obtained using this QR code.

10. TECHNICAL DATA

All hazardous materials work stations have the following electrical connection data:
Rated voltage 230 V 50 Hz.
Power consumption 70-150 W (depending on device size)

Key for "Technical data" table

1	Height (external)	11	Depth usable work surface with media duct
2	Height with support frame for sitting work	12	Depth (external)
3	Height with support frame for standing work	13	Depth (internal)
4	Work height sitting	14	Max. charge of the working surface
5	Work height standing	15	Weight
6	Clear height	16	Noise level (approx.)
7	Width (external)	17	Differential pressure per air duct
8	Width (internal)	18	Amount of air ducts
9	Width usable work surface	19	Extraction air
10	Depth usable work surface	20	Nominal volume flow

										
	11	12	13	14	15	16	17	18	19	20
GAP.110.090	530	750	650	3000	66	32.0	82	1	250	550
GAP.110.090.060	380	600	500	3000	60	32.0	82	1	250	550
GAP.110.090.085	630	850	750	3000	70	32.0	82	1	250	550
GAP.110.120	530	750	650	3000	75	32.0	60	1	250	550
GAP.110.120.060	380	600	500	3000	69	32.0	60	1	250	550
GAP.110.120.085	630	850	750	3000	79	32.0	60	1	250	550
GAP.110.150	530	750	650	3000	84	36.0	77	1	250	660
GAP.110.150.060	380	600	500	3000	77	36.0	60	1	250	660
GAP.110.150.085	630	850	750	3000	88	36.0	60	1	250	660
GAP.110.180	530	750	650	3000	93	36.0	70	1	250	770
GAP.110.180.060	380	600	500	3000	85	36.0	70	1	250	770
GAP.110.180.085	630	850	750	3000	97	36.0	70	1	250	770
GAP.110.210	530	750	650	3000	116	40.0	55	2	250	880
GAP.110.210.060	380	600	500	3000	108	40.0	50	2	250	880
GAP.110.210.085	630	850	750	3000	120	40.0	55	2	250	880
GAP.110.240	530	750	650	3000	116	40.0	50	2	250	990
GAP.110.240.060	380	600	500	3000	107	40.0	50	2	250	990
GAP.110.240.085	630	850	750	3000	121	38.0	50	2	250	990
GAP.140.090	530	750	650	3000	76	32.0	140	1	250	720
GAP.140.090.060	380	600	500	3000	70	32.0	140	1	250	720
GAP.140.090.085	630	850	750	3000	81	32.0	140	1	250	720
GAP.140.090.EC	530	750	650	3000	78	32.0	82	1	250	550
GAP.140.090.EX	530	750	650	3000	94	55.0	140	1	250	720
GAP.140.090.WA	530	750	650	3000	76	32.0	82	1	250	550
GAP.140.120	530	750	650	3000	86	32.0	103	1	250	720
GAP.140.120.060	380	600	500	3000	80	32.0	103	1	250	720
GAP.140.120.085	630	850	750	3000	92	32.0	103	1	250	720
GAP.140.120.EC	530	750	650	3000	89	32.0	60	1	250	550
GAP.140.120.EX	530	750	650	3000	104	55.0	103	1	250	720
GAP.140.120.WA	530	750	650	3000	86	32.0	60	1	250	550
GAP.140.150	530	750	650	3000	97	32.0	105	1	250	895
GAP.140.150.060	380	600	500	3000	90	32.0	105	1	250	895
GAP.140.150.085	630	850	750	3000	103	32.0	105	1	250	895
GAP.140.150.EC	530	750	650	3000	101	32.0	60	1	250	660
GAP.140.180	530	750	650	3000	107	36.0	135	1	250	1070
GAP.140.180.060	380	600	500	3000	99	36.0	135	1	250	1070
GAP.140.180.085	630	850	750	3000	113	36.0	135	1	250	1070
GAP.140.180.EC	530	750	650	3000	110	36.0	70	1	250	770
GAP.140.180.EX	530	750	650	3000	126	55.0	135	1	250	1070
GAP.140.210	530	750	650	3000	122	40.0	100	2	250	1180
GAP.140.210.060	380	600	500	3000	114	40.0	100	2	250	1180
GAP.140.210.085	630	850	750	3000	128	40.0	100	2	250	1180
GAP.140.240	530	750	650	3000	130	40.0	86	2	250	1290
GAP.140.240.060	380	600	500	3000	122	40.0	86	2	250	1290
GAP.140.240.085	630	850	750	3000	137	40.0	86	2	250	1290

										
	1	2	3	4	5	6	7	8	9	10
GAP.110.090	1100	1785	1965	720	900	810	900	865	790	640
GAP.110.090.060	1100	1785	1965	720	900	810	900	865	790	490
GAP.110.090.085	1100	1785	1965	720	900	810	900	865	790	740
GAP.110.120	1100	1785	1965	720	900	810	1200	1165	1090	640
GAP.110.120.060	1100	1785	1965	720	900	810	1200	1165	1090	490
GAP.110.120.085	1100	1785	1965	720	900	810	1200	1165	1090	740
GAP.110.150	1100	1785	1965	720	900	810	1500	1465	1390	640
GAP.110.150.060	1100	1785	1965	720	900	810	1500	1465	1390	490
GAP.110.150.085	1100	1785	1965	720	900	810	1500	1465	1390	740
GAP.110.180	1100	1785	1965	720	900	810	1800	1765	1690	640
GAP.110.180.060	1100	1785	1965	720	900	810	1800	1765	1690	490
GAP.110.180.085	1100	1785	1965	720	900	810	1800	1765	1690	740
GAP.110.210	1100	1785	1965	720	900	810	2100	2065	1990	640
GAP.110.210.060	1100	1785	1965	720	900	810	2100	2065	1990	490
GAP.110.210.085	1100	1785	1965	720	900	810	2100	2065	1990	740
GAP.110.240	1100	1785	1965	720	900	810	2400	2365	2290	640
GAP.110.240.060	1100	1785	1965	720	900	810	2400	2365	2290	490
GAP.110.240.085	1100	1785	1965	720	900	810	2400	2365	2290	740
GAP.140.090	1400	2085	2265	720	900	1110	900	865	790	640
GAP.140.090.060	1400	2085	2265	720	900	1110	900	865	790	490
GAP.140.090.085	1400	2085	2265	720	900	1110	900	865	790	740
GAP.140.090.EC	1400	2085	2265	720	900	1110	900	865	790	640
GAP.140.090.EX	1400	2085	2265	720	900	1110	900	865	790	640
GAP.140.090.WA	1400	2085	2265	720	900	1110	900	865	790	640
GAP.140.120	1400	2085	2265	720	900	1110	1200	1165	1090	640
GAP.140.120.060	1400	2085	2265	720	900	1110	1200	1165	1090	490
GAP.140.120.085	1400	2085	2265	720	900	1110	1200	1165	1090	740
GAP.140.120.EC	1400	2085	2265	720	900	1110	1200	1165	1090	640
GAP.140.120.EX	1400	2085	2265	720	900	1110	1200	1165	1090	640
GAP.140.120.WA	1400	2090	2265	720	900	1110	1200	1165	1090	640
GAP.140.150	1400	2085	2265	720	900	1110	1500	1465	1390	640
GAP.140.150.060	1400	2085	2265	720	900	1110	1500	1465	1390	490
GAP.140.150.085	1400	2085	2265	720	900	1110	1500	1465	1390	740
GAP.140.150.EC	1400	2085	2265	720	900	1110	1500	1465	1390	640
GAP.140.180	1400	2085	2265	720	900	1110	1800	1765	1690	640
GAP.140.180.060	1400	2085	2265	720	900	1110	1800	1765	1690	490
GAP.140.180.085	1400	2085	2265	720	900	1110	1800	1765	1690	740
GAP.140.180.EC	1400	2085	2265	720	900	1110	1800	1765	1690	640
GAP.140.180.EX	1400	2085	2265	720	900	1110	1800	1765	1690	640
GAP.140.210	1400	2085	2265	720	900	1110	2100	2065	1990	640
GAP.140.210.060	1400	2085	2265	720	900	1110	2100	2065	1990	490
GAP.140.210.085	1400	2085	2265	720	900	1110	2100	2065	1990	740
GAP.140.240	1400	2085	2265	720	900	1110	2400	2365	2290	640
GAP.140.240.060	1400	2085	2265	720	900	1110	2400	2365	2290	490
GAP.140.240.085	1400	2085	2265	720	900	1110	2400	2365	2290	740