



### **OMS Double Actuator Braking Solenoids**

The braking solenoid used by OMS is an OEM product manufactured exclusively for OMS by Kendrion Binder. The design and the construction of the solenoid are such, that it will withstand the operating temperatures found in escalators and elevators indefinitely at 100% „On Time“, which is present in escalators use only. Maximum ambient temperature , operating, is  $T_{AMB} = 50^{\circ}C$  (  $T_{AMB} = 60^{\circ}C @ 1 \text{ hour}$  ) for the units.

Due to the solid design and construction of these solenoids, it is not necessary to monitor their operating temperature or to use a thermocontact switch ( or PTC ) to give an early warning signal to an overtemperature condition.

These solenoids are of the electrical double circuit type, meaning that separate coils are used for each of the two magnet circuits. These solenoids can be equipped with one or two electronic control modules, depending on customers requirements.

The electronic control module ( OMS pat. pending ) come in two versions:

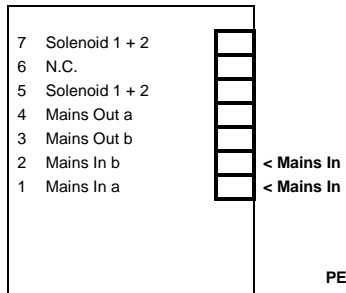
- Type 1: without overexcitation, electronic self commutated switch in the DC path switches off in 100ms,  $F = 240N$
- Type 2: with overexcitation, electronic self commutated switch in the DC path switches off in 100ms,  $F = 600N$  and  $F = 720N$

#### **SOLENOID TYPES:**

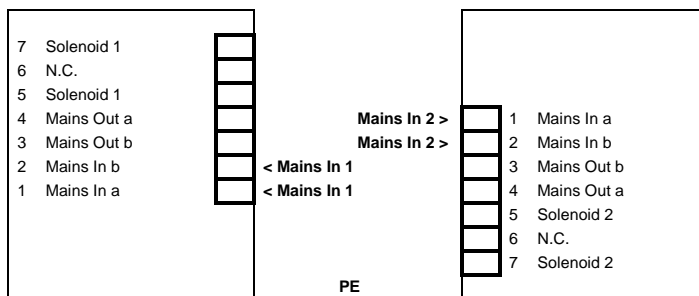
<i>TYPE</i>	<i>FORCE [N]</i>	<i>No. of Modules</i>	<i>Type of Modul</i>	<i>Remarks</i>
<b>O20</b>	240	1	Type 1	
<b>O21</b>	600	1	Type 2	
<b>O22</b>	600	2	Type 2	
<b>O23</b>	600	2	Type 2	O22 with separte external wiring for earth quake security
<b>O31</b>	720	1	Type 2	
<b>O32</b>	720	2	Type 2	
<b>O33</b>	720	2	Type 2	O32 with separte external wiring for earth quake security



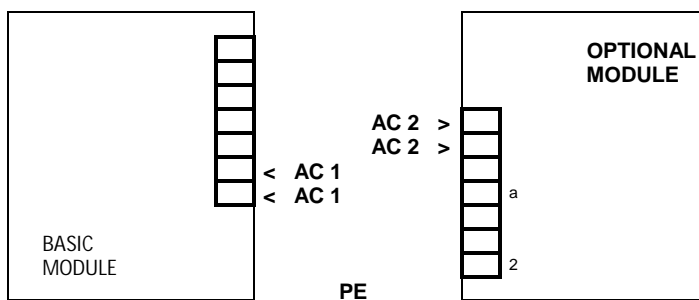
**Mains connection for OMS braking solenoid for ELEVATORS**



**O21 and O31: Connection for one electrical circuit, both circuits are operated in parallel.**



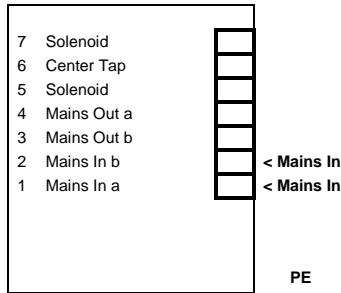
**O23 and O33: Connection for two electrical circuits, both circuits are operated independently.**



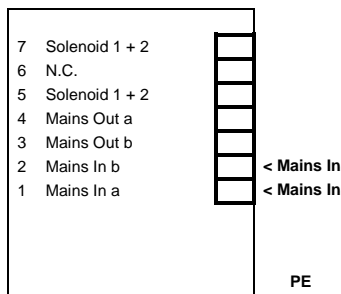
**Wiring scheme on top of the wiring box.**



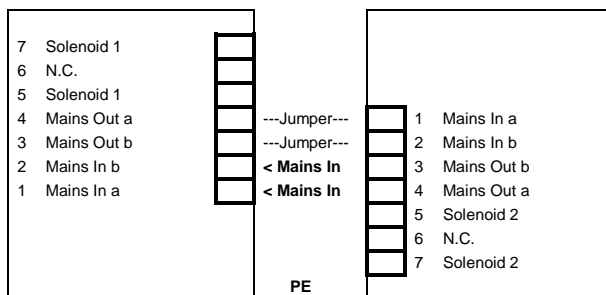
**Mains connection for OMS braking solenoid for Escalators**



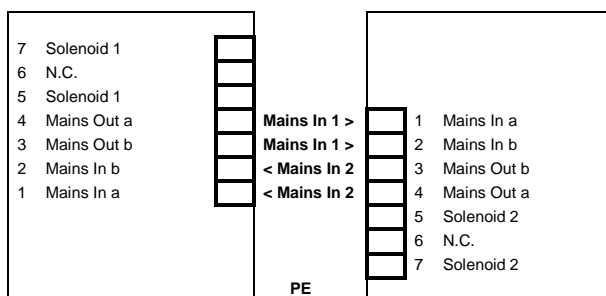
**O20: Connections for single module without over-excitation**



**O21 and O31: Connections for single module with over-excitation**



**O22 and O32: Connections for double modules with over-excitation, single mains connection**



**O23 and O33: Connections for double modules with over-excitation, double mains connection**





Picture: O20 Braking Solenoid, view into the opened junction box shows the electronic control module.  
All braking solenoids are available with CSA approval.

