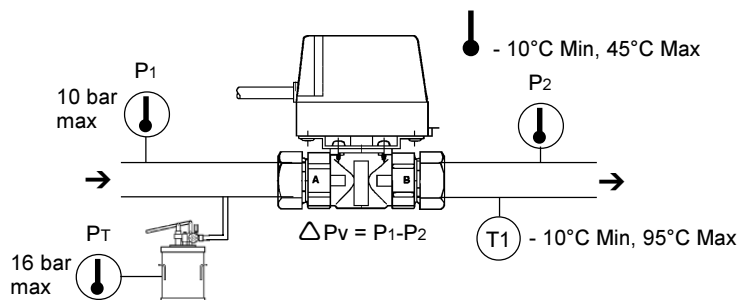


# Instructions HPV/HPVB/HP...B



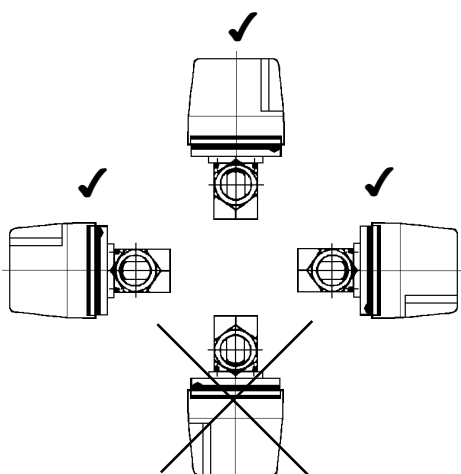
## 1) Specification / Specifikation / Technische Daten / Caractéristiques / Especificación / Dati tecnici / Specificaties

| Size | Kv (M3/h) | $\Delta P_v$ (bar) | Type    |          |
|------|-----------|--------------------|---------|----------|
| 15mm | 3.0       | 1.0                | HPV15   | HPVB15   |
|      | 3.3       |                    | HPV22   | HPVB22   |
| 22mm | 5.8       | 0.7                | HPV15   | HPVB28   |
|      | 8.2       |                    | HPV0.5  | HPVB0.5  |
| 28mm | 7.9       | 1.0                | HPV0.5  | HPVB0.75 |
|      | 15.0      |                    | HPV0.75 | HPVB1.0  |
| 1/2" | 3.0       | 0.7                | HPV1.0  |          |
|      | 3.3       |                    |         |          |
| 3/4" | 5.8       | 1.0                |         |          |
|      | 8.2       |                    |         |          |
| 1"   | 8.0       | 0.7                |         |          |
|      | 15.0      |                    |         |          |



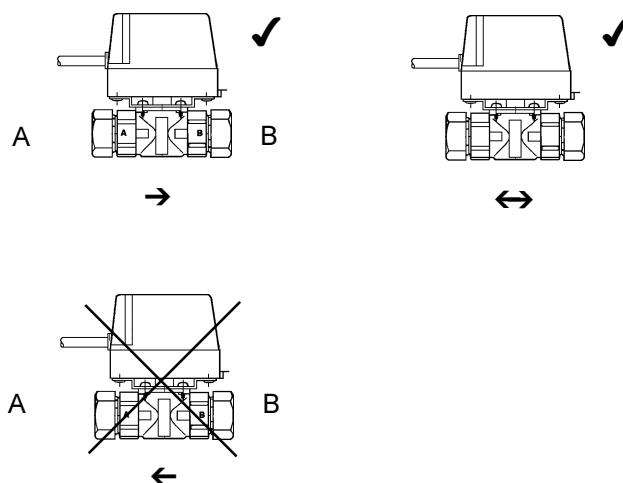
| GB                             | DK                                    | D                             | F                                     | ES                                     | I                            | NL                               |
|--------------------------------|---------------------------------------|-------------------------------|---------------------------------------|----------------------------------------|------------------------------|----------------------------------|
| Electrically operated valve    | Elektrisk betjent ventil              | Elektrisch betriebenes ventil | Electrovanne                          | Válvula operada eléctricamente         | Elettrovalvola               | Elektrische klep                 |
| Not for use with potable water | Må ikke benyttes i vandinstallationer | Trinkwasser nicht geeignet    | Ne pas utiliser avec de L'eau potable | No indicado para usar con agua potable | Non usare con acqua potabile | Niet voor gebruik met drinkwater |

## 2) Installation / Installation / Installation / Installation / Instalación / Installazione / Installatie

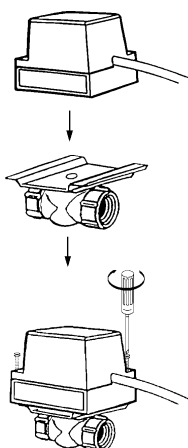


HPVB/HP...B

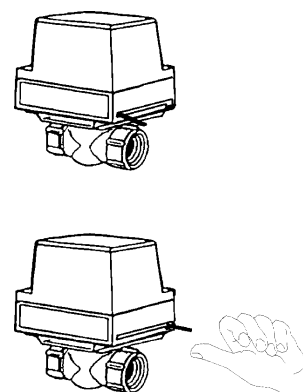
HPV



## 3) Assembly / Montage / Montage / Assemblage / Montaje / Assemblaggio / Montage

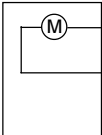
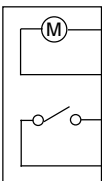
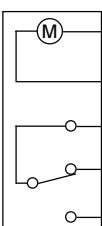


## 4) Operation / Driftsundstilling / Bedienung / Fonctionnement / Operación / Utilizzo / Bediening



# HPA/HP...B Instructions



| GB                                                                                 | DK                                | D                    | F                   | ES                  | I                        | NL                         |
|------------------------------------------------------------------------------------|-----------------------------------|----------------------|---------------------|---------------------|--------------------------|----------------------------|
| Shown De-energised                                                                 | Vist ved ikke-tilsluttet tilstand | Darstellung stromlos | Moteur hors tension | Esguema sin tensión | Attuatore non alimentato | Latenzien: niet in werking |
| HPA2N (6VA)                                                                        | HPA2N (6VA)                       | HPA2N (6VA)          | HPA2N (6VA)         | HPA2N (6VA)         | HPA2N (6VA)              | HPA2N (6VA)                |
|   | Brun (L)                          | Braun (L)            | Marron (L)          | Marrón (L)          | Marrone (L)              | Bruin (L)                  |
| Blue (N)                                                                           | Blå (N)                           | Blau (N)             | Bleu (N)            | Azul (N)            | Blu (N)                  | Blauw (N)                  |
|                                                                                    |                                   |                      |                     |                     |                          |                            |
| Shown De-energised                                                                 | Vist ved ikke-tilsluttet tilstand | Darstellung stromlos | Moteur hors tension | Esguema sin tensión | Attuatore non alimentato | Latenzien: niet in werking |
| HPA2/HP...B (6VA)                                                                  | HPA2 (6VA)                        | HPA2 / HP...B (6VA)  | HPA2 (6VA)          | HPA2 (6VA)          | HPA2 (6VA)               | HPA2 (6VA)                 |
|   | Brun (L)                          | Braun (L)            | Marron (L)          | Marrón (L)          | Marrone (L)              | Bruin (L)                  |
| Blue (N)                                                                           | Blå (N)                           | Blau (N)             | Bleu (N)            | Azul (N)            | Blu (N)                  | Blauw (N)                  |
| Grey                                                                               | Giå                               | Grau                 | Gris                | Gris                | Grigio                   | Orys                       |
| Orange                                                                             | Orange                            | Orange               | Orange              | Naranja             | Arancio                  | Oranje                     |
| SPST. 3(1)A, 230VAC                                                                |                                   | Hilfsschalter        |                     |                     |                          |                            |
| Shown De-energised                                                                 | Vist ved ikke-tilsluttet tilstand | Darstellung stromlos | Moteur hors tension | Esguema sin tensión | Attuatore non alimentato | Latenzien: niet in werking |
| HPA2C (6VA)                                                                        | HPA2C (6VA)                       | HPA2C (6VA)          | HPA2C (6VA)         | HPA2C (6VA)         | HPA2C (6VA)              | HPA2C (6VA)                |
|  | Brun (L)                          | Braun (L)            | Marron (L)          | Marrón (L)          | Marrone (L)              | Bruin (L)                  |
| Blue (N)                                                                           | Blå (N)                           | Blau (N)             | Bleu (N)            | Azul (N)            | Blu (N)                  | Blauw (N)                  |
| Orange                                                                             | Orange                            | Orange               | Orange              | Naranja             | Arancio                  | Oranje                     |
| White                                                                              | Hvid                              | Weiß                 | Blanc               | Blanco              | Bianco                   | Wit                        |
| Grey                                                                               | Giå                               | Grau                 | Gris                | Gris                | Grigio                   | Orys                       |
| SPST. 3(1)A, 230VAC                                                                |                                   |                      |                     |                     |                          |                            |

| GB                    | DK                        | D                             | F                                 | ES                            | I                                        | NL                             |          |
|-----------------------|---------------------------|-------------------------------|-----------------------------------|-------------------------------|------------------------------------------|--------------------------------|----------|
| Switch current rating | Kontakbelastning          | Nominale Kontaktstrom         | Caractéristique de commutateur    | Amperaje del interruptor      | Portata dell'interruttore                | Kontakt belasting              | 3(1)A    |
| Switch action         | Kontakttype               | Schalterart                   | Type de commutateur               | Tipo de interruptor           | Tipo de interruttore                     | Kontakt type                   | Type 1B  |
| Max temperature       | Maks omgivende temperatur | Maximale Umgebungs-temperatur | Température ambiante maximale     | Temperatura ambiente máxima   | Temperatura ambiente massima             | Maximale omgevingstempeatuur   | 45°C     |
| Enclosure rating      | Tæthedegrad               | Schutzart                     | Indice de protection              | Protección IP                 | Grado di protezione                      | Beschermingsfaktor             | IP40     |
| Pollution situation   | Kontrol forurenings       | Emissionswerte                | Etat du contrôle de pollution     | Estado de control de polución | Situazione del controllo d'inquinamento  | Emissie waarde                 | Degree 2 |
| Ball pressure temp    | Kugle tryk test           | Kugeldruckprüfung             | Tension assignée de tenue au choc | Ensayo de presión con bola    | Test pressione sfera                     | Kogeltest                      | 75°C     |
| Open/close time       | Ventilens åbne-/lukketid  | Laufzeit öffnen/schließen     | Temps d'ouverture/de fermeture    | Tiempo de apertura/cierre     | Tempo di apertura/chiusura della valvola | Klepafsluiter open/dicht lyden | 30/10Sec |
| Rated impulse voltage | Nominel impuls spænding   | Nenimpulsspannung             | Essai à la bille                  | Tensión del impulso           | Tensione nominale d'impulso              | Nominale pulsspanning          | 2.5K     |

|    |                                                                       |    |                                                                 |
|----|-----------------------------------------------------------------------|----|-----------------------------------------------------------------|
| GB | For operating voltage refer to rating label on product                | NL | Spanning by in bedrijf: zie labelop product                     |
| DK | For driftsspænding se vurderingsmærke på produkt                      | I  | La tensione di esercizio è indicata sull'etichetta del prodotto |
| D  | Betriebsspannung siehe Typenschild                                    | ES | Tensión de operación. Ver etiqueta                              |
| F  | Tension d'alimentation voir la plaque d'identification sur le produit |    |                                                                 |



This product complies with the following EC Directives:  
 Electro-Magnetic Compatibility Directive.  
 (EMC) (89\336\EEC), (92\31\EEC)  
 Low Voltage Directive.  
 (LVD) (73\23\EEC), (93\68\EEC)  
 Pressure Directive (PD) 97\23\EC

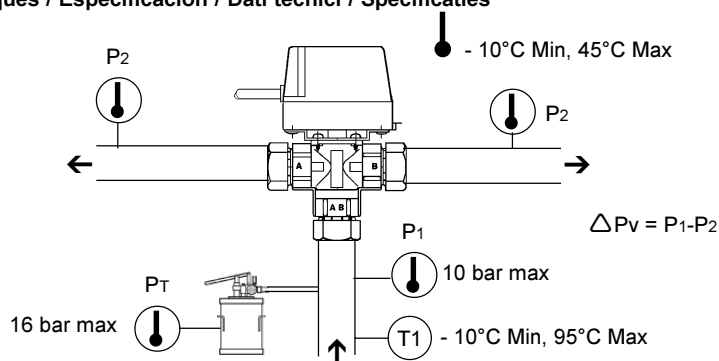


# Instructions HSV3/HS3B/HS3DB



## 1) Specification / Specifikation / Technische Daten / Caractéristiques / Especificación / Dati tecnici / Specificaties

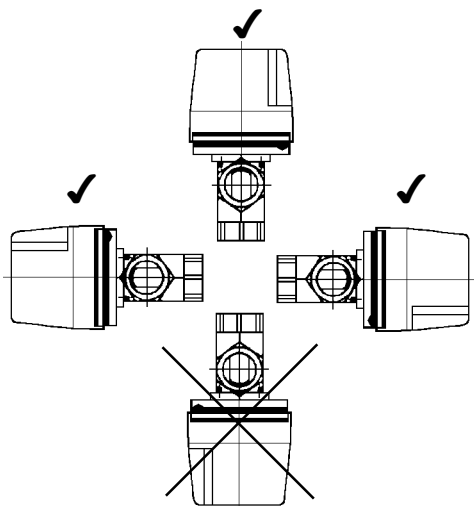
| Size | Kv (M3/h) | $\Delta P_v$ (bar) | Type      |
|------|-----------|--------------------|-----------|
| 15mm | 3.0       | 1.0                | HSV3B15   |
| 22mm | 6.1       |                    | HSV3B22   |
| 22mm | 6.8       |                    | HSV3      |
| 28mm | 7.9       | 0.7                | HSV3B28   |
| 1/2" | 3.0       | 1.0                | HSV3B0.5  |
| 3/4" | 6.1       |                    | HSV3B0.75 |
| 1"   | 8.0       |                    | HSV3B1.0  |



| GB                             | DK                                    | D                             | F                                     | ES                                     | I                            | NL                               |
|--------------------------------|---------------------------------------|-------------------------------|---------------------------------------|----------------------------------------|------------------------------|----------------------------------|
| Electrically operated valve    | Elektrisk betjente ventil             | Elektrisch betriebenes Ventil | Electrovanne                          | Válvula operada eléctricamente         | Elettrovalvola               | Elektrische klep                 |
| Not for use with potable water | Må ikke benyttes i vandinstallationer | Trinkwasser nicht geeignet    | Ne pas utiliser avec de l'eau potable | No indicado para usar con agua potable | Non usare con acqua potabile | Niet voor gebruik met drinkwater |

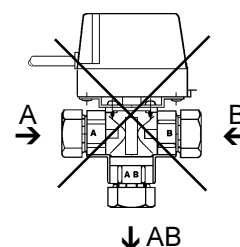
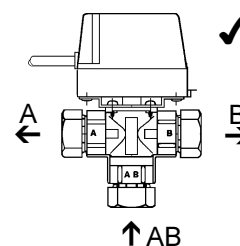
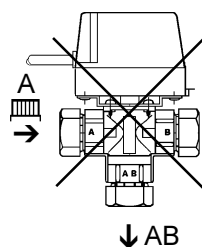
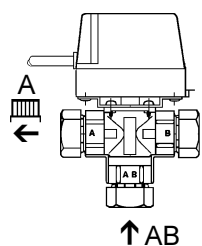
## Installation / Installation / Installation / Installation / Instalación / Installazione / Installatie

2a)

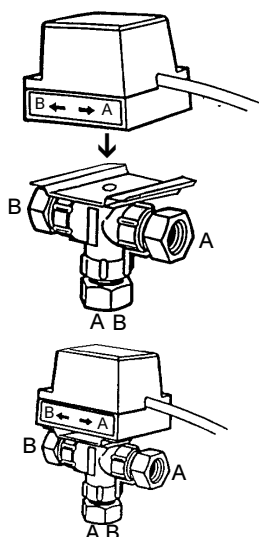


2b) HSV3 + HSA3

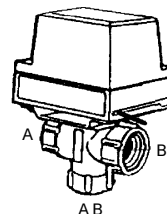
HSV3 + HSA3D + HS3DB



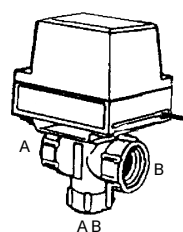
## 3) Assembly / Montage / Montage / Assemblage / Montaje / Assemblaggio / Montage



## 4) Operation / Driftsundstilling / Bedienung / Fonctionnement / Operación / Utilizzo / Bedienung



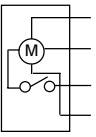
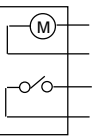
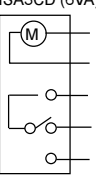
Auto / Automatisk / Automatik / Automatique / Automático / Automatico / Automatisch



Manual / Manuel / Manuell / Manuel / Manual / Manuale / Handmatig

# Instructions HSA3/HSA3D/HS3DB



| GB                                                                                  | DK                                                          | D                                               | F                                                 | ES                                                  | I                                                     | NL                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-------------------------------------------------|
| Shown De-energised                                                                  | Vist ved ikke-tilsluttet tilstand                           | Darstellung stromlos                            | Moteur hors tension                               | Esguema sin tensión                                 | Attuatore non alimentato                              | Latenzien: niet in werking                      |
| HSA3 (6VA)                                                                          | HSA3 (6VA)                                                  | HSA3 (6VA)                                      | HSA3 (6VA)                                        | HSA3 (6VA)                                          | HSA3 (6VA)                                            | HSA3 (6VA)                                      |
|    | Blå (N)<br>Brun/Hvid<br>Grå (HWS sat.)<br>Orange (HWS call) | Blau (N)<br>Braun/Weiß<br>Grau<br>Orange        | Bleu (N)<br>Marron/Blanc<br>Gris<br>Orange        | Azul (N)<br>Marrón/Blanco<br>Gris<br>Naranja        | Blu (N)<br>Marrone/Bianco<br>Grigio<br>Arancio        | Blauw (N)<br>Bruin/Wit<br>Orys<br>Oranje        |
| SPST: 3(1)A, 230VAC                                                                 |                                                             |                                                 |                                                   |                                                     |                                                       |                                                 |
| Shown De-energised                                                                  | Vist ved ikke-tilsluttet tilstand                           | Darstellung stromlos                            | Moteur hors tension                               | Esguema sin tensión                                 | Attuatore non alimentato                              | Latenzien: niet in werking                      |
| HSA3D/HS3DB (6VA)                                                                   | HSA3D (6VA)                                                 | HSA3D/HS3DB (6VA)                               | HSA3D (6VA)                                       | HSA3D (6VA)                                         | HSA3D (6VA)                                           | HSA3D (6VA)                                     |
|    | Brun (L)<br>Blå (N)<br>Grå<br>Orange                        | Braun (L)<br>Blau (N)<br>Grau<br>Orange         | Marron (L)<br>Bleu (N)<br>Gris<br>Orange          | Marrón (L)<br>Azul (N)<br>Gris<br>Naranja           | Marrone (L)<br>Blu (N)<br>Grigio<br>Arancio           | Bruin (L)<br>Blauw (N)<br>Orys<br>Oranje        |
| SPST: 3(1)A, 230VAC                                                                 |                                                             | Hilfsschalter                                   |                                                   |                                                     |                                                       |                                                 |
| Shown De-energised                                                                  | Vist ved ikke-tilsluttet tilstand                           | Darstellung stromlos                            | Moteur hors tension                               | Esguema sin tensión                                 | Attuatore non alimentato                              | Latenzien: niet in werking                      |
| HSA3CD (6VA)                                                                        | HSA3CD (6VA)                                                | HSA3CD (6VA)                                    | HSA3CD (6VA)                                      | HSA3CD (6VA)                                        | HSA3CD (6VA)                                          | HSA3CD (6VA)                                    |
|    | Brun (L)<br>Blå (N)<br>Orange<br>Hvid<br>Grå                | Braun (L)<br>Blau (N)<br>Orange<br>Weiß<br>Grau | Marron (L)<br>Bleu (N)<br>Orange<br>Blanc<br>Gris | Marrón (L)<br>Azul (N)<br>Naranja<br>Blanco<br>Gris | Marrone (L)<br>Blu (N)<br>Arancio<br>Bianco<br>Grigio | Bruin (L)<br>Blauw (N)<br>Oranje<br>Wit<br>Orys |
| SPST: 3(1)A, 230VAC                                                                 |                                                             |                                                 |                                                   |                                                     |                                                       |                                                 |
| Shown De-energised                                                                  | Vist ved ikke-tilsluttet tilstand                           | Darstellung stromlos                            | Moteur hors tension                               | Esguema sin tensión                                 | Attuatore non alimentato                              | Latenzien: niet in werking                      |
| HSA3ND (6VA)                                                                        | HSA3ND (6VA)                                                | HSA3ND (6VA)                                    | HSA3ND (6VA)                                      | HSA3ND (6VA)                                        | HSA3ND (6VA)                                          | HSA3ND (6VA)                                    |
|  | Brun (L)<br>Blå (N)                                         | Braun (L)<br>Blau                               | Marron (L)<br>Bleu (N)                            | Marrón (L)<br>Azul (N)                              | Marrone (L)<br>Blu (N)                                | Bruin (L)<br>Blauw (N)                          |
|                                                                                     |                                                             |                                                 |                                                   |                                                     |                                                       |                                                 |

| GB                    | DK                        | D                             | F                                 | ES                            | I                                         | NL                              |              |
|-----------------------|---------------------------|-------------------------------|-----------------------------------|-------------------------------|-------------------------------------------|---------------------------------|--------------|
| Operating Voltage     | Forsyningsspænding        | Betriebsspannung              | Tension d'alimentation            | Tensión de suministro         | Tensione di funzionamento                 | Voedingsspanning                | 230Vac, 50Hz |
| Switch current rating | Kontakbelastning          | Nominale Kontaktstrom         | Caractéristique de commutateur    | Amperaje del interruptor      | Portata dell'interruttore                 | Kontakt belasting               | 3(1)A        |
| Switch action         | Kontakttype               | Schalterart                   | Type de commutateur               | Tipo de interruptor           | Tipo de interruttore                      | Kontakt type                    | Type 1B      |
| Max temperature       | Maks omgivende temperatur | Maximale Umgebungs-temperatur | Température ambiante maximale     | Temperatura ambiente máxima   | Temperatura ambiente massima              | Maximale omgevings-tempeatuur   | 45°C         |
| Enclosure rating      | Tæthedsgrad               | Schutzart                     | Indice de protection              | Protección IP                 | Grado di protezione                       | Beschermingsfaktor              | IP40         |
| Pollution situation   | Kontrol forurenings       | Emissionswerte                | Etat du contrôle de pollution     | Estado de control de polución | Situazione del controllo d'inquinamento   | Emissie waarde                  | Degree 2     |
| Ball pressure temp    | Kugle tryk test           | Kugeldruckprüfung             | Tension assignée de tenue au choc | Ensayo de presión con bola    | Test pressione sfera                      | Kogeltest                       | 75°C         |
| Open/close time       | Ventilens åbne-/ lukketid | Laufzeit öffnen/ schließen    | Temps d'ouverture/ de fermeture   | Tiempo de apertura/ cierre    | Tempo di apertura/ chiusura della valvola | Klepafsluiter open/ dicht lyden | 30/10Sec     |
| Rated impulse voltage | Nominel impuls spænding   | Nenimpulsspannung             | Essai à la bille                  | Tensión del impulso           | Tensione nominale d'impulso               | Nominale pulsspanning           | 2.5K         |

|    |                                                                       |    |                                                                 |
|----|-----------------------------------------------------------------------|----|-----------------------------------------------------------------|
| GB | For operating voltage refer to rating label on product                | NL | Spanning by in bedryf: zie labelop product                      |
| DK | For driftsspænding se vurderingsmærke på produkt                      | I  | La tensione di esercizio è indicata sull'etichetta del prodotto |
| D  | Betriebsspannung siehe Typenschild                                    | ES | Tensión de operación. Ver etiqueta                              |
| F  | Tension d'alimentation voir la plaque d'identification sur le produit |    |                                                                 |



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This product complies with the following EC Directives:  
Electro-Magnetic Compatibility Directive.  
(EMC) (89\336\EEC), (92\31\EEC)  
Low Voltage Directive.  
(LVD) (73\23\EEC), (93\68\EEC)  
Pressure Directive (PD) 97\23\EEC

