



GOYEN RCA3

SOLENOID PILOT VALVES

GOYEN RCA3D REMOTE PILOT

Remote solenoid pilot valve to control the actuation of dust collector diaphragm valves.



RCA3D with
flying lead
connection



RCA3D with
conduit entry
connection



RCA3D
with spade
connection



RCA3D with
DIN43650A connection

SUITABLE FOR

All Goyen dust collector diaphragm valves.

INSTALLATION

Prepare pilot mounting hole in panel to Ø19.3/19.4 (Ø0.760"). Panel thickness must exceed 1.5mm (0.062"). Ensure o-ring is in place before tightening locknut. Preferably, install pilot valves with solenoid on top. For reliable operation, ensure supply voltage is within -10% and +15% of rated solenoid voltage. Replace components within 1 million cycles (refer to Spare Parts)

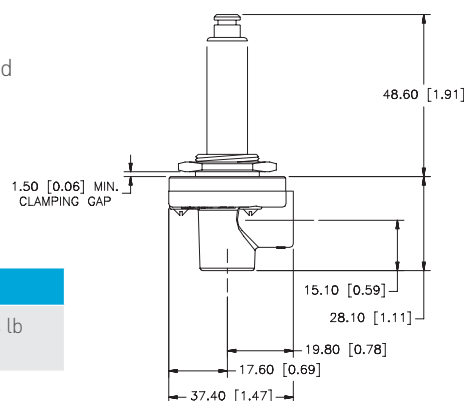
CONSTRUCTION

Body: Aluminium (diecast)
Ferrule: 305 SS
Armature: 430FR SS
Seals: Nitrile or Viton
Locknut: Mild steel zinc passivated
Screws: 302 SS or 304 SS
Clip: Mild steel (plated)

DIMENSIONS AND WEIGHTS

(Dimensions in mm and inches)

SERIES	WEIGHT
RCA3D0, RCA3D1 (no solenoid)	0.174 kg/0.384 lb



PRODUCT PERFORMANCE

FLOW	MAXIMUM WORKING PRESSURE	MINIMUM WORKING PRESSURE	TEMPERATURE MIN	TEMPERATURE MAX	FLUID MEDIA
0.32 Cv	860 kPa	0 kPa	-40°C	82°C	Air or
0.27 Kv	125 psi	0 psi	-40°F	180°F	inert gas

ORDER CODE*

MODEL	THREAD TYPE	ORIFICE SIZE
RCA3D0-...	1/8" NPT	3.2mm (0.126")
RCA3D1-...	1/8" BSPP	3.2mm (0.126")

*Please refer to Q Series Solenoid pilot product data sheet on Page 3 for information on electrical characteristics and to complete the order code, e.g. 1/8" NPT pilot valve with 240 VAC solenoid = RCA3D0-300

SPARE PARTS

K0380 Replacement seal, armature, spring & ferrule kit.
K0384 As above in viton.

OPERATION

Recommended on time range: 50–500 ms
Recommended time between pulses: 1 minute or greater

APPROVALS

- C-Tick
- CE – EMC (2004/108/EC) and LV (2006/95/EC)
- CSA

OPTIONS

None

ORDER CODE AND ELECTRICAL CHARACTERISTICS

MODEL	CONNECTION TYPE	PROTECTION CLASS	VOLTAGE	POWER
RCA3D0 Series = 1/8" NPT				
RCA3D0-300	DIN 43650A	IP65	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D0-301	DIN 43650A	IP65	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D0-302	DIN 43650A	IP65	24 V 50/60 Hz	23.1/17.2 V A
RCA3D0-303	DIN 43650A	IP65	110 V DC	24 W
RCA3D0-304	DIN 43650A	IP65	48 V DC	20 W
RCA3D0-305	DIN 43650A	IP65	24 V DC	20 W
RCA3D0-306	DIN 43650A	IP65	12 V DC	20 W
RCA3D0-310	Conduit (M20 x 1.5)	IP31	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D0-311	Conduit (M20 x 1.5)	IP31	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D0-312	Conduit (M20 x 1.5)	IP31	24 V 50/60 Hz	23.1/17.2 V A
RCA3D0-313	Conduit (M20 x 1.5)	IP31	24 V DC	20 W
RCA3D0-314	Conduit (M20 x 1.5)	IP31	12 V DC	20 W
RCA3D0-320	Conduit (1/2" NPSC)	IP31	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D0-321	Conduit (1/2" NPSC)	IP31	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D0-322	Conduit (1/2" NPSC)	IP31	24 V 50/60 Hz	23.1/17.2 V A
RCA3D0-323	Conduit (1/2" NPSC)	IP31	24 V DC	20 W
RCA3D0-324	Conduit (1/2" NPSC)	IP31	12 V DC	20 W
RCA3D0-330	Screw / spade	N/A	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D0-331	Screw / spade	N/A	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D0-332	Screw / spade	N/A	24 V 50/60 Hz	23.1/17.2 V A
RCA3D0-333	Screw / spade	N/A	240 V DC	24 W
RCA3D0-334	Screw / spade	N/A	110 V DC	24 W
RCA3D0-335	Screw / spade	N/A	48 V DC	20 W
RCA3D0-336	Screw / spade	N/A	24 V DC	20 W
RCA3D0-337	Screw / spade	N/A	12 V DC	20 W
RCA3D0-340	Flying Lead	IP64	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D0-341	Flying Lead	IP64	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D0-342	Flying Lead	IP64	24 V 50/60 Hz	23.1/17.2 V A
RCA3D0-343	Flying Lead	IP64	24 V DC	20 W
RCA3D0-344	Flying Lead	IP64	12 V DC	20 W
RCA3D1 Series = 1/8" BSPP				
RCA3D1-300	DIN 43650A	IP64	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D1-301	DIN 43650A	IP64	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D1-302	DIN 43650A	IP64	24 V 50/60 Hz	23.1/17.2 V A
RCA3D1-303	DIN 43650A	IP64	110 V DC	24 W
RCA3D1-304	DIN 43650A	IP64	48 V DC	20 W
RCA3D1-305	DIN 43650A	IP64	24 V DC	20 W
RCA3D1-306	DIN 43650A	IP64	12 V DC	20 W
RCA3D1-310	Conduit (M20 x 1.5)	IP31	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D1-311	Conduit (M20 x 1.5)	IP31	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D1-312	Conduit (M20 x 1.5)	IP31	24 V 50/60 Hz	23.1/17.2 V A
RCA3D1-313	Conduit (M20 x 1.5)	IP31	24 V DC	20 W
RCA3D1-314	Conduit (M20 x 1.5)	IP31	12 V DC	20 W
RCA3D1-320	Conduit (1/2" NPSC)	IP31	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D1-321	Conduit (1/2" NPSC)	IP31	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D1-322	Conduit (1/2" NPSC)	IP31	24 V 50/60 Hz	23.1/17.2 V A
RCA3D1-323	Conduit (1/2" NPSC)	IP31	24 V DC	20 W
RCA3D1-324	Conduit (1/2" NPSC)	IP31	12 V DC	20 W
RCA3D1-330	Screw / spade	N/A	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D1-331	Screw / spade	N/A	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D1-332	Screw / spade	N/A	24 V 50/60 Hz	23.1/17.2 V A
RCA3D1-333	Screw / spade	N/A	240 V DC	24 W
RCA3D1-334	Screw / spade	N/A	110 V DC	24 W
RCA3D1-335	Screw / spade	N/A	48 V DC	20 W
RCA3D1-336	Screw / spade	N/A	24 VDC	20 W
RCA3D1-337	Screw / spade	N/A	12 VDC	20 W
RCA3D1-340	Flying Lead	IP64	200/240 V 50/60 Hz	17.4/22.6 V A
RCA3D1-341	Flying Lead	IP64	100/120 V 50/60 Hz	15.2/19.7 V A
RCA3D1-342	Flying Lead	IP64	24 V 50/60 Hz	23.1/17.2 V A
RCA3D1-343	Flying Lead	IP64	24 V DC	20 W
RCA3D1-344	Flying Lead	IP64	12 V DC	20 W

Notes: RCA3D0-305 is an RCA3D remote pilot with 1/8" NPT threads and a 24 V DC DIN43650A connection.

RCA3D1-331 is an RCA3D remote pilot with 1/8" BSPP threads and 110/240 V AC spade screw coil.

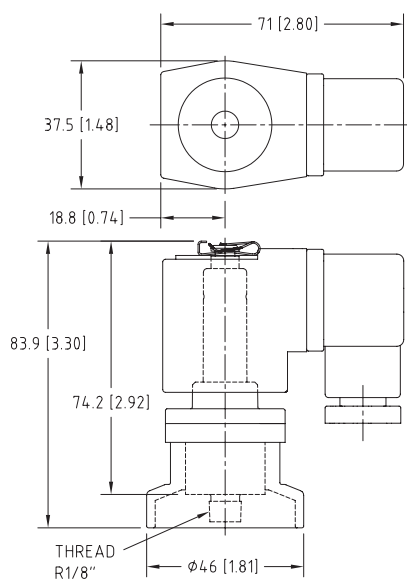
GOYEN RCA3DM

PILOT VALVE



DIMENSIONS

(Dimensions in mm and [inches])



FOR INTEGRAL PILOT (CA) APPLICATIONS:

The **RCA3DM** is a pilot valve with an integral silencer and dust shroud which mounts directly (screw-in) to the 4 series valve cover.

RCA3DM and RCA3PV are suitable piloting options for all 4 Series valves and the RCA35T diaphragm valve.

COIL CONSTRUCTION

Encapsulation: PA-66

C-Frame: Mild steel, zinc passivated

Bobbin: PA-66

Insulation class: B/130°C

IP Rating: IP65

Rating: Non-continuous use only

Clip: Mild steel (mechanically plated)

OPERATION

Recommended on time range: 50 to 500 ms

Recommended time between pulses: 1 minute or greater

COIL CERTIFICATION AND CONFORMITIES

- C-Tick
- EMC (89/336/CE)
- CE – EMC (2004/108/EC) and LV (2006/95/EC)
- CSA

SPARE PARTS:

K0380 – Kit includes Nitrile replacement seal, armature, spring and ferrule.

K0384 – Kit includes Viton replacement seal, armature, spring and ferrule.

Please refer to next page for replacement coil options.

GOYEN RCA3DM

PILOT VALVE

HOW TO ORDER

RCA 3 DM - 301		
Valve type	Coil series	
RCA – Pilot valve – Remote-controlled air	3 – Goyen 'Q' coil	
Pilot size	Body style	
3 – 1/8" Pipe thread	DM – Male inlet, R 1/8" thread, suits all Series 4 RCAC valves	

PRODUCT PERFORMANCE

FLOW	MAXIMUM WORKING PRESSURE	MINIMUM WORKING PRESSURE	TEMPERATURE MIN.		TEMPERATURE MAX.		FLUID MEDIA
			NITRILE	VITON	NITRILE	VITON	
0.32 Cv	860 kPa	0 kPa	–40°C	–29°C	82°C	+232°C	Air or
0.27 Kv	125 psi	0 psi	–40°F	–20°F	180°F	+450°F	inert gas

ORDER CODE AND ELECTRICAL CHARACTERISTICS

ELECTRICAL CHARACTERISTICS						
DIN Socket Connector			PG9 Connection [Cable Entry]			
DIN Socket Specification			EN175301 – 803 (previously DIN 43650A) / A/ISO 4400			
DIN Socket Optional			94/9/CE ATEX ii 3GD T6			
Isolation Class DIN Socket			VDE 0110 – 1/89			
DIN Socket Protection			IP65 EN60529			
CODE	TYPE	CONNECTION TYPE	PROTECTION CLASS	VOLTAGE	POWER	COLOUR
300	QR	DIN43650A	IP65	200/240 V 50/60 Hz	17.4/22.6 VA	Grey
301	QR	DIN43650A	IP64	100/120 V 50/60 Hz	15.2/19.7 VA	Grey
302	QR	DIN43650A	IP64	24 V 50/60 Hz	23.1/17.2 VA	Grey
303	QR	DIN43650A	IP64	110 V DC	24 W	Grey
304	QR	DIN43650A	IP64	48 V DC	20 W	Grey
305	QR	DIN43650A	IP64	24 V DC	20 W	Grey
306	QR	DIN43650A	IP64	12 V DC	20 W	Grey
310	QD	Conduit (M20 × 1.5)	IP31	200/240 V 50/60 Hz	17.4/22.6 VA	Green
311	QD	Conduit (M20 × 1.5)	IP31	100/120 V 50/60 Hz	15.2/19.7 VA	Green
312	QD	Conduit (M20 × 1.5)	IP31	24 V 50/60 Hz	23.1/17.2 VA	Green
313	QD	Conduit (M20 × 1.5)	IP31	24 V DC	20 W	Green
314	QD	Conduit (M20 × 1.5)	IP31	12 V DC	20 W	Green
320	QD	Conduit (½" NPSC)	IP31	200/240 V 50/60 Hz	17.4/22.6 VA	Green
321	QD	Conduit (½" NPSC)	IP31	100/120 V 50/60 Hz	15.2/19.7 VA	Green
322	QD	Conduit (½" NPSC)	IP31	24 V 50/60 Hz	23.1/17.2 VA	Green
323	QD	Conduit (½" NPSC)	IP31	24 V DC	20 W	Green
324	QD	Conduit (½" NPSC)	IP31	12 V DC	20 W	Green

3DS PILOT VALVE

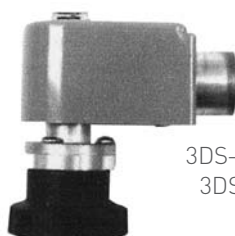
Pilot valve with integral silencer and dust shroud to mount directly to dust collector diaphragm valve.



3DS-0



3DS-300 to
3DS-306



3DS-310 to
3DS-324

Armature: 430FR SS
Encapsulation: PA-6
Insulation: Class B/130°C
Seals: Nitrile
Shroud: PA-6

OPERATION

Recommended on time range: 50–500 ms
Recommended time between pulses: 1 minute or greater

APPROVALS

- C-Tick
- EMC (89/336/CE)

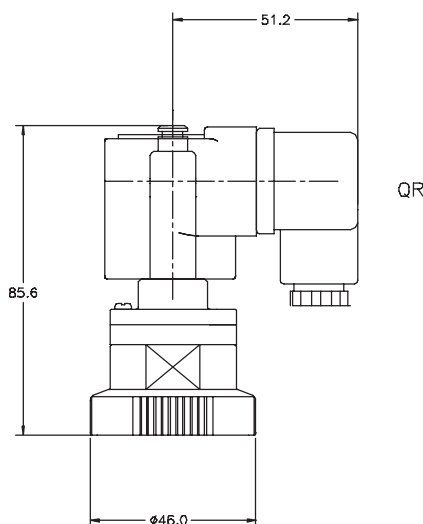
OPTIONS

None

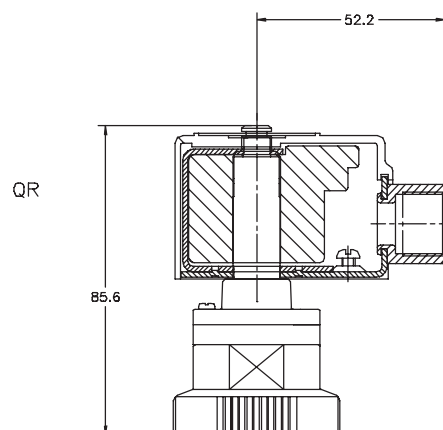
DIMENSIONS AND WEIGHTS

(Dimensions in mm)

SERIES	WEIGHT
3DS-0	0.096 kg/0.211 lb
3DS-300 to 3DS-306	0.246 kg/0.542 lb
3DS-310 to 3DS-324	0.266 kg/0.586 lb



3DS-300 to 3DS-306



3DS-310 to 3DS-324

SUITABLE FOR

RCAC20T3, RCAC20ST3, RCAC20DD3, RCAC20FS3, RCAC25T3, RCAC25DD3, RCAC25FS3 dust collector valves only.

INSTALLATION

Ensure o-ring is in place on diaphragm valve cover. Gripping the shroud, hand tighten 3DS pilot valve onto cover of diaphragm valve. For reliable operation, ensure supply voltage is within –10% and +15% of rated solenoid voltage. Solenoid is free to rotate on pilot valve. 3DS thread will suit 1/8 BSP T, 1/8 BSP P and 1/8 NPT ports. Replace pilot components within 1 million cycles (refer to Spare Parts).

CONSTRUCTION

Body: Al 2011-T3

Ferrule: 302 SS

PRODUCT PERFORMANCE

FLOW	MAXIMUM WORKING PRESSURE	MINIMUM WORKING PRESSURE	TEMPERATURE MIN	TEMPERATURE MAX	FLUID MEDIA
0.32 Cv	860 kPa	0 kPa	–40°C	82°C	Air or
0.27 Kv	125 psi	0 psi	–40°F	180°F	inert gas

SPARE PARTS

K0380 Nitrile replacement seal, armature, spring and ferrule.
K0384 As above in Viton rubber.

GOYEN 3DS

PILOT VALVE

ORDER CODE AND ELECTRICAL CHARACTERISTICS

MODEL	CONNECTION TYPE	PROTECTION CLASS	VOLTAGE	POWER
3DS-300	DIN 43650A	IP64	200/240 V 50/60 Hz	23.1 V A
3DS-301	DIN 43650A	IP64	100/120 V 50/60 Hz	19.8 V A
3DS-302	DIN 43650A	IP64	24 V 50/60 Hz	23.1 V A
3DS-303	DIN 43650A	IP64	110 V DC	24 W
3DS-304	DIN 43650A	IP64	48 V DC	20 W
3DS-305	DIN 43650A	IP64	24 V DC	20 W
3DS-306	DIN 43650A	IP64	12 V DC	20 W
3DS-310	Conduit (M20 × 1.5)	IP31	200/240 V 50/60 Hz	23.1 V A
3DS-311	Conduit (M20 × 1.5)	IP31	100/120 V 50/60 Hz	19.8 V A
3DS-312	Conduit (M20 × 1.5)	IP31	24 V 50/60 Hz	23.1 V A
3DS-313	Conduit (M20 × 1.5)	IP31	24 V DC	20 W
3DS-314	Conduit (M20 × 1.5)	IP31	12 V DC	20 W
3DS-320	Conduit (½" NPSC)	IP31	200/240 V 50/60 Hz	23.1 V A
3DS-321	Conduit (½" NPSC)	IP31	100/120 V 50/60 Hz	19.8 V A
3DS-322	Conduit (½" NPSC)	IP31	24 V 50/60 Hz	23.1 V A
3DS-323	Conduit (½" NPSC)	IP31	24 V DC	20 W
3DS-324	Conduit (½" NPSC)	IP31	12 V DC	20 W

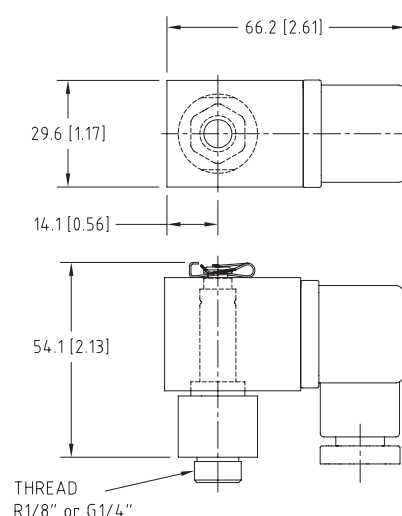
GOYEN RCA3PV/3PV2

PILOT VALVE



DIMENSIONS

(Dimensions in mm and [inches])



FOR INTEGRAL PILOT (CA) APPLICATIONS:

The **RCA3PV** pilot is another option for integral pilot (CA) applications. The RCA3PV pilot is a screw-in pilot available in 1/8" and 1/4" port sizing.

RCA3DM and RCA3PV are suitable piloting options for all 4 Series valves and the RCA35T diaphragm valve.

CONSTRUCTION

Encapsulation: Nylon

Insulation class: H/180°C

IP Rating: IP65

Rating: Non-continuous use only

Clip: Mild steel (mechanically plated)

OPERATION

Recommended on time range: 50 to 500 ms

Recommended time between pulses: 1 minute or greater

CERTIFICATION AND CONFORMITIES

- CE – LV (2006/95/EC)
– ROHS (2002/95/CE)

SPARE PARTS:

No pilot valve overhaul kits are available for the RCA3PV pilot; however, coil kits are available as listed below:

K0203 – Dual rating: 110 V DC 18 W or 220/240 V 50/60 Hz – kit includes coil, stabilus clip and washer.

K0204 – Dual rating: 48 V DC 18 W or 115 V 50/60 Hz – kit includes coil, stabilus clip and washer.

K0205 – Dual rating: 24 V DC 18 W or 48 V 50/60 Hz – kit includes coil, stabilus clip and washer.

K0206 – Dual rating: 12 V DC 18 W or 24 V 50/60 Hz – kit includes coil, stabilus clip and washer.

GOYEN RCA3PV/3PV2

PILOT VALVE

HOW TO ORDER

	RCA 3 PV 2 - 2 0 5	
Valve type		Voltage options
RCA – Pilot valve – Remote-controlled air		3 Dual rating: 110 V DC 18 W or 220/240 V 50/60 Hz 46/37 VA
Pilot size		4 Dual rating: 48 V DC 18 W or 115 V 50/60 Hz 63/53 VA
3 – 1/8" Pipe thread		5 Dual rating: 24 V DC 18 W or 48 V 50/60 Hz 41/32 VA
Body style		6 Dual rating: 12 V DC 18 W or 24 V 50/60 Hz 38/31 VA
PV – Male inlet, suits all RCA and RCAC main valves		Coil connection
Thread type		0 – Square DIN connector
Blank – R1/8" thread		Coil series
2 – G1/4" thread		2 – DIN 43650 Form B connection

	RCA3PV 2 - 203	
Valve type		Coil series
Remote Pilot valve		Blank – Pilot only
Pilot size		203
Blank – 1/8"		204
2 – 1/4" thread		205
		206
		See table below for coil code.

PRODUCT PERFORMANCE

FLOW	MAXIMUM WORKING PRESSURE	MINIMUM WORKING PRESSURE	TEMPERATURE MIN.	TEMPERATURE MAX.	FLUID MEDIA
0.28 Cv	860 kPa	0 kPa	–40°C	82°C	Air or
0.24 Kv	125 psi	0 psi	–40°F	180°F	inert gas

ORDER CODE AND ELECTRICAL CHARACTERISTICS

ELECTRICAL CHARACTERISTICS						
DIN Socket Connector			PG9 Connection (Cable Entry)			
DIN Socket Specification			EN175301 – 803 (previously DIN 43650A) / A/ISO 4400			
DIN Socket Optional			94/9/CE ATEX ii 3GD T6			
Isolation Class DIN Socket			VDE 0110 – 1/89			
DIN Socket Protection			IP65 EN60529			
CODE	TYPE	CONNECTION TYPE	PROTECTION CLASS	VOLTAGE	POWER	COLOUR
206	SB4	DIN43650A	IP65	12 V DC (max. +10% supply)	18 W	Black
205	SB4	DIN43650A	IP65	24 V DC (max. +10% supply)	18 W	Black
204	SB4	DIN43650A	IP65	48 V DC (max. +10% supply)	18 W	Black
203	SB4	DIN43650A	IP65	110 V DC (max. +10% supply)	18 W	Black
206	SB4	DIN43650A	IP65	24 V 50/60 Hz (max. +10% supply)	38/31 VA	Black
205	SB4	DIN43650A	IP65	48 V 50/60 Hz (max. +10% supply)	41/32 VA	Black
204	SB4	DIN43650A	IP65	110/127 V 50/60 Hz (max. +10% supply)	63/53 VA	Black
203	SB4	DIN43650A	IP65	220/240 V 50/60 Hz (max. +10% supply)	46/37 VA	Black



CLEANAIRSYSTEMS.COM

© 2014 Pentair Clean Air Systems reserves the right to change product designs and specifications without notice.