

Documentation for:

Project name: Extra fans ramp 47 Vågsbygdporten

Systemair works reference: 0002647089

Customer P.O. number: 1443486

Fan model: AJ 710-9/38°-2(K)

Motor: 34,0 kW, 2P, PAD, IP 55, S1

Quantity supplied: 4 pcs

Content:

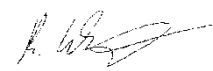
- Fan conformity certificate
- IOM (Installation, Operation, Maintenance)
Manual Jet Tunnel Fan
- Fan AJ - Installation/suspension drawing
- IOM fan motor
- Fan test sheet (4 pages)
- EC declaration of conformity
- ISO 9001:2000 certificate

Date: 03.07.2013

Signed:



Frank Jenderek



Ralf Uher

Systemair GmbH

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Date: 03.07.2013

Systemair AS NO Oslo
Postboks 6745 Etterstad
NO-0609 OSLO
NORWAY

FAN CONFORMITY CERTIFICATE

We certify that the under-mentioned Fan / Motor units will confirm in all respects, their having been manufactured in accordance with the conditions and requirements of ISO9001:2000 to the Purchase Order &/or Specification / Drawings.

Purchase Order No.: - 1443486
Customer: - Systemair NO
Order confirmation No.: - 0002647089
Quantity: - 4
Fan type: - **AJ 710-9/38 °2(K)**
Motor fitted: - 34,0 kW, 2P, PAD, IP 55, S1

Motor Part No: - KC740448, KC740640, KC740582, KC740448

For & on behalf of
Systemair

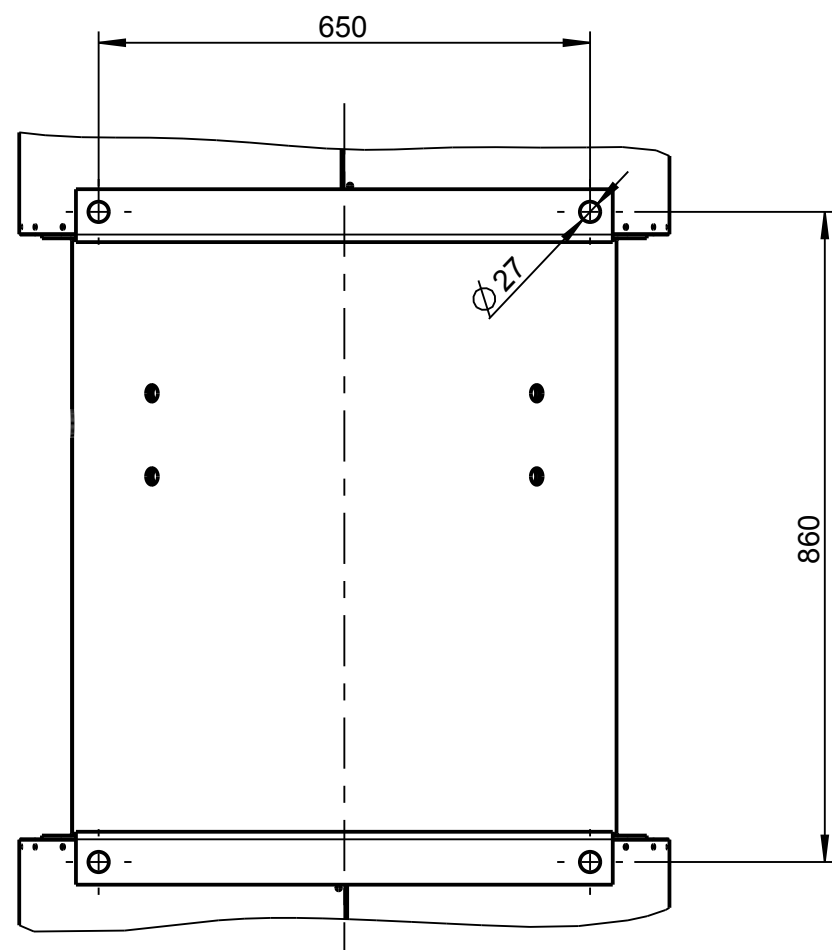
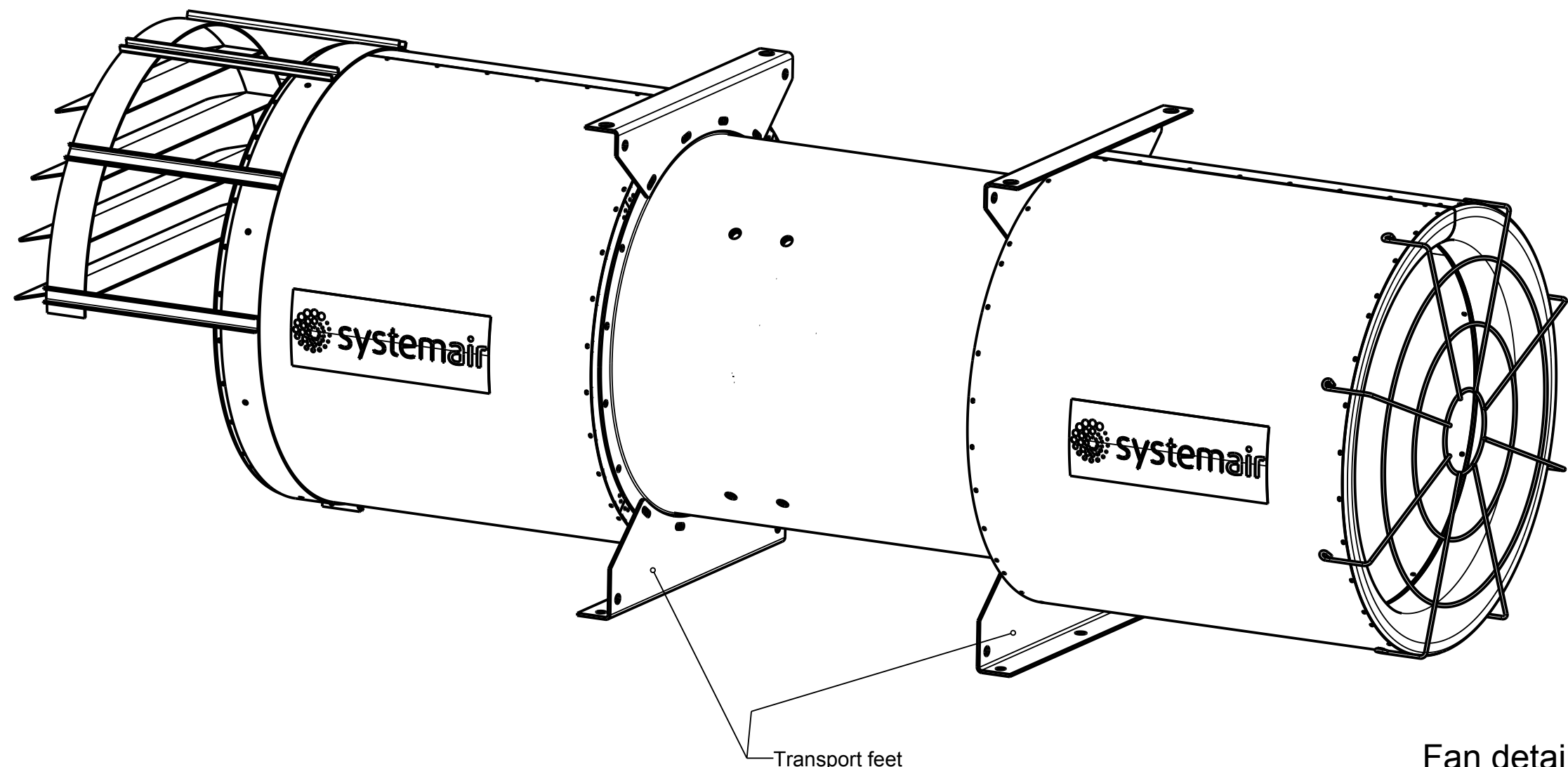
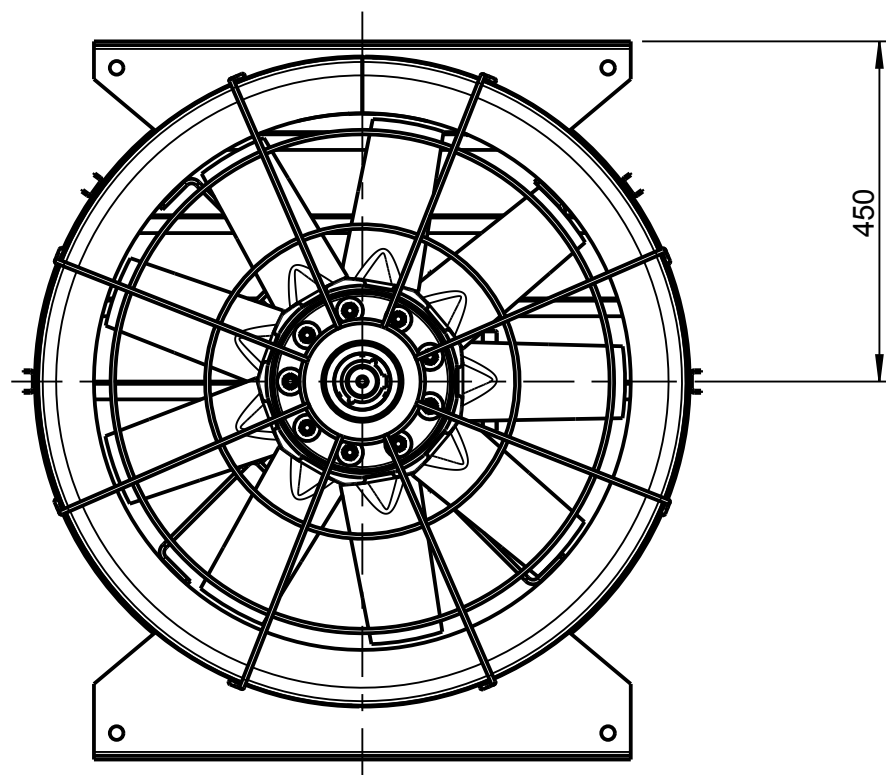
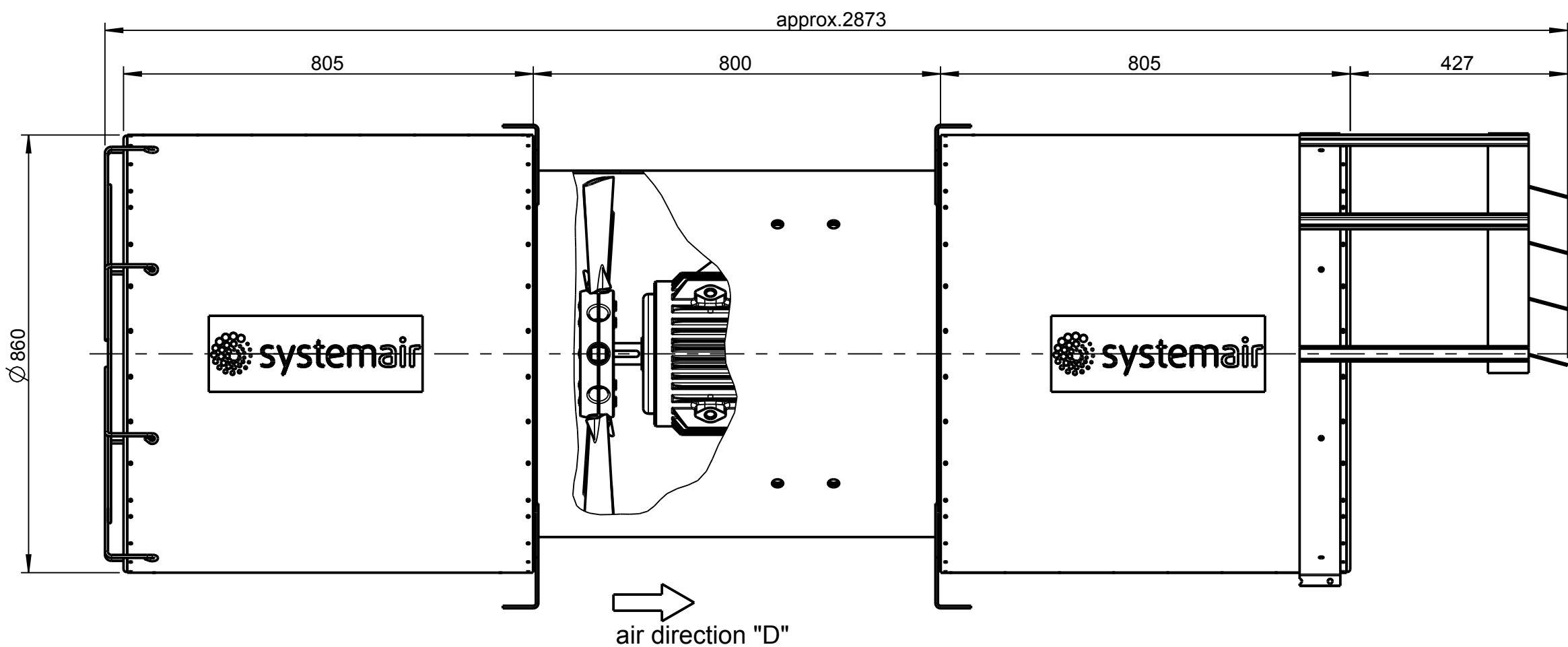


F.Jenderek
Project Manager



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Surface:

- casing:
hot dipped galvenised,
Powder coated RAL 7035
- silencer:
pre galvanized,
powder coated RAL 7035
perforated inner liner: stainless steel 1.4301
- mounting feet:
hot dipped galvenised,
powder coated RAL 7035

drawing checked / approved:

date: _____

name: _____

Fan details:

AJ 710-9/xx°-2(K)

Motor details:

Motor Manufacturer:
Insulation H - 250°C / 2h
Motor Protection IP 55
Motor Speed (1/min) 2880
Motor Power (kW) 34
Power Supply 400V / 50Hz / 3 Ph

Fan weigth:

approx: 430 kg

					Datum/date	Name/name	Systemair Artikelnr. :/ Systemair item no. : -	Maßstab / scale:	1:10	Gewicht / weight:		
					03.12.2012	M. Stahl						
					gestrichelt dashed	-		-	Oberfl. Qualität / surface quality:	-	Baugröße / size:	
					Werkstoff: siehe Stückliste material: see bill of material		Lieferant Art.Nr. :/ supplier item no. : -	 Zeichnungsnummer/drawing no. : AJ710 3412NO				
					Dicke: siehe Stückliste thickness: see bill of material							
					Maße ohne Toleranz- angabe nach: measurements without tolerances according: DIN 6930-m		Benennung/title: AJ 710 project: Vågsbygdporten					
					Änderungsindex / revision index:							

Electric motors

Customer safety and installation instructions

AC induction machines (50-1000V AC) DC machines (75-1500V DC)



Warning

Avertissement

Achtung

Avviso

All operations must be carried out by appropriately trained personnel.
Toutes les manoeuvres doivent être effectuées par un personnel ayant reçu une formation appropriée.
Alle Arbeiten müssen von entsprechend geschultem Personal ausgeführt werden.
Tutte le operazioni devono essere effettuate da personale qualificato.



Lifting

Levage

Heben

Sollevamento



e.g. both lifting points if fitted
ex: les deux points de levage si installés
z.B. beide Hebepunkte falls vorhanden
es. Entrambi i punti di sollevamento se presenti



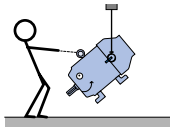
or single lifting point if fitted
ex: le point de levage unique si installé
oder einzelnen Hebepunkt, falls vorhanden
es. o il punto di sollevamento singolo se presente

Note: maximum hand lift is 20kg below shoulder, but above ground level.

Noter: le poids maximum de levage manuel est de 20kg.

Bitte beachten: max. Hublast mit der Hand 20kg unter der Schulter, aber über dem Boden.

Nota: il sollevamento a mano massimo è di 20kg al di sotto della spalla ma al di sopra del livello del suolo.



Vertical lifting – Prevent uncontrolled rotation.

Levage vertical – Empêcher toute rotation non contrôlée.

Senkrechtes Heben – unkontrolliertes Drehen vermeiden.

Sollevamento verticale – evitare una rotazione senza controllo.

Use all lifting facilities provided

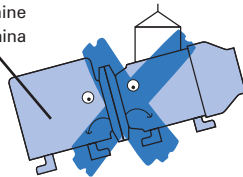
Utiliser tous les dispositifs de levage prévus

Alle vorgesehenen Hebevorrichtungen benutzen

Usare tutti i dispositivi per il sollevamento installati



Machine
Machine
Machine
Macchina



Do not lift other equipment with motor lifting points only.

Ne pas soulever d'autres équipements en utilisant uniquement les points de levage du moteur.

Angebaute Maschinen nicht mit Motorringöse heben.

Non sollevare altre apparecchiature usando solamente i punti di sollevamento del motore.



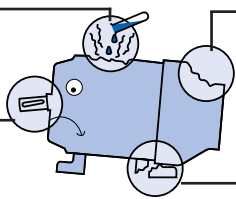
Frame size
Hauteur d'axe
Baugröße
Dimensione carcassa
NEMA



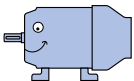
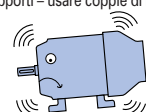
Frame size
Hauteur d'axe
Baugröße
Dimensione carcassa
NEMA

Maximum gross weights		Poids bruts maximum			Maximale bruttogewichte			Pesi lordi massimi		
 20 kg 44 lb	 50 kg 110 lb	 125kg 275 lb	 250 kg 550 lb	 500 kg 1100 lb	 750 kg 1650 lb	 1000 kg 2200 lb	 1500 kg 3300 lb	 2000 kg 4400 lb	 2500 kg 5500lb	 3500 kg 7700lb
63, 71 & 80	90 & 100	112, 132	160 & 180	200 & 225	250	280	315	355S	355M	355L
56	143/5	182/4 213/5	254/6 284/6	324/5 364/5	404/5	444/5	504/5	585-7	585-7	585-7
63 & 71	80, 90 & 100	112	132	160 & 180 254/6 284/6 217	200	225	250	250		355
					324 2112/3	364 2811/23	404 3211/2	404 3611/2		585-7 4411/23



Pre-installation checks	Contrôles avant l'installation	Überprüfungen vor der installation	Controlli di pre-installazione
Corrosion Corrosion Korrosion Corrosione			Fan cover damage Dégâts sur capot de ventilateur Schäden an der Lüfterhaube Danno alla calotta copriventola
Shaft damage Dégâts sur l'arbre Schäden an der Welle Danno all'albero			Foot/mounting damage Dégâts sur les pattes de fixation Schäden am Gehäuse/Füßen Danno al piedi del motore
● Check nameplate details Vérifier les renseignements indiqués sur la plaque signalétique Typenschilddetails prüfen Controllo dei valori in targa			
● Duty matches application? Leistung betriebsausreichend?		Le service correspond-t-il à l'application? La potenza nominale del motore è adatta all'impiego?	
● No loose fasteners? Keine losen Befestigungsteile?		Pas de fixations desserrées? L'attacco è ben fissato?	



Installation Mechanical	Installation Mécanique	Mechanische Installation	Installazione Meccanica
● Level mounting surface Montagefläche ausrichten 	● Not misaligned Ausrichtung überprüfen	Vérifiez l'alignement du moteur Superficie di montaggio piana	
● Mountings – use appropriate fastener torques Befestigungen – korrekte Anzugsdrehmomente benutzen.		Pas de désalignement Non allineato	Fixation – utiliser les couples de serrage appropriés Supporti – usare coppie di fissaggio appropriato
			
● Balanced	Equilibrage	Unwucht prüfen	Bilanciato
● Gaskets, and/or sealants, guards correctly fitted	Joints et/ou garnitures d'étanchéité, capot correctement monté	Korrekte Montage von Dichtungen, Kabeldurchführungen und Schutzvorrichtungen überprüfen	Le guarnizioni, tenute e protezioni devono essere montate correttamente
● Belt tension	Tension de courroie	Riemenspannung	Tensione cinghia
● Ensure adequate ventilation Für einen freien Kühlluftstrom sorgen		Vérifier que la ventilation est correcte Assicurare una ventilazione adeguata	
● Drain plugs (if supplied). Fit to retain enclosure and certification Kondenswasserstopfen (wenn geliefert) montieren zum Erhalt der Schutzart		Bouchon de purge (si fournis) monté pour maintenir la protection et certification Montare i tappi di scarica condensa (se forniti) per mantenere il grado di protezione e la certificazione	
● If noise level Lp is >80dB (A) at 1m, protection may be required Si niveau sonore Lp >80dB (A) à 1m, des protections peuvent être nécessaires Für Schalldruckpegel (Lp) grösser als 80dB (A), 1m von der Oberfläche des Motors – Ohrenschützer können erforderlich sein Si il livello di rumore Lp è di >80dB (A) ad 1m, sarà forse necessario usare dispositivi di protezione			
● If temperature limits are specified, fit thermal protection devices Wenn Temperaturgrenze vorgeschrieben, Schutzvorrichtungen montieren		Si des limites de temperature sont spécifiées, monter des protections thermiques Se i limiti di temperatura sono specificati, montare ripari	



Installation Electrical	Installation Électrique	Elektrische Installation	Installazione Elettrica
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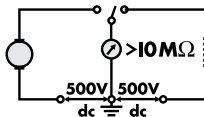
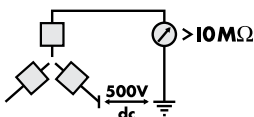


● Earthed

Mise à la terre

geerdet

A terra



- Check insulation resistance of all windings with 500V dc megger and discharge after test. If less than 10MΩ, dry out

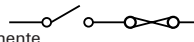
Vérifier la résistance d'isolement des bobinages à l'aide d'une magneto de 500V cc et déchargement après la mesure . Si < à 10MΩ, éteuver le bobinage

Der Isolationswiderstand jeder Wicklung muss mit einem Isolationsprüfer (500V GS) gemessen werden und nach der Messung entladen werden. Wenn weniger als 10MΩ Trocknung erforderlich

La resistenza d'isolamento di ogni avvolgimento deve essere misurata con megger (500V c.c.) e scaricata dopo il rilevamento

- Fused and isolated correctly
Korrekt absichern und
isolieren

Protégé par coupe circuit et
isolé correctement
Fusibilo ed isolato correttamente



- Overloads correctly set?

Überlastungsschutz richtig eingestellt?

Les relais de surcharge sont-ils
correctement réglés?
I sovraccarichi sono impostati
correttamente?

- Heater terminals (if fitted), will be live when motor is stationary

Les bornes des rechauffeurs (si fournis), seront alimentées lorsque le moteur est à l'arrêt

Die Klemmen der Heizelement (wenn montiert) bleiben gefährlich auch bei Stillstand
I terminali del riscaldatore (se montati), saranno sotto tensione quando il motore è fermo

- Mains cable correctly sized?

Sind die Kabel gross genug?

Les câbles d'alimentation sont-ils
correctement dimensionnés?
La dimensione dei cavi di alimentazione
è corretta?

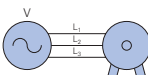
- Covers must be fitted

Abdeckungen müssen angebracht sein

Les capots doivent être en place
I coperchi devono essere montati

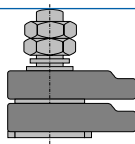


Connections	Connexions	Anschlüsse	Collegamenti
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- Check connection diagram
Vérifier le schéma de câblage
Anschlüsse nach
Anschlussplan überprüfen
Controllare lo schema di
collegamento

- Check free rotation of driven equipment
Vérifier que la machine
entraînée est libre
Prüfen, ob angetriebene
Maschine frei beweglich ist
Controllare che la macchina
condotta sia libera



- Correct terminal arrangement
Vérifier le repérage des
bornes
Auf einwandfreien
elektrischen Anschluss
achten
Stringere i collegamenti
elettrici

- Check rotation, uncoupled
Vérifier la rotation à vide
Maschine im Leerlauf prüfen
Controllare la rotazione
del motore disaccoppiato dalla
macchina

- Connections are tight?
Les connexions sont-elles
bien serrées?
Sind die Anschlüsse fest
angezogen?
I Collegamenti sono stretti?

- Check fan rotation
Vérifier la rotation du
ventilateur
Drehrichtung von Gebläsen
prüfen
Controllare la rotazione della
ventola

	Problems	Problèmes	Probleme	Problemi
	Noisy · vibration tripping · overheating run-up	Bruit · vibrations déclenchement surchauffe · démarrage	Geräusche · Vibration Überstromauslösung Überhitzung Anlaufschwierigkeiten	Rumore · vibrazione scatto · surriscaldamento accelerazione
	Refer to supplier Quote motor number	Consulter le fournisseur Donnez le numéro du moteur	Hersteller fragen Motornummer angeben	Consultare il fornitore Citare il numero di serie del motore

	Maintenance	Entretien	Wartung	Manutenzione
 			Refer to supplier for details Pour les détails, consulter le fournisseur Schmierung usw. siehe Herstellerangaben	
		Isolate Trennen	Isoler Isolare	Consultare il fornitore per i dettagli sulla lubrificazione, ecc ...

	Spares	Pièces de rechange	Ersatzteile	Pezzi di ricambio
	Refer to supplier	Consulter le fournisseur	An Hersteller wenden	Consultare il fornitore
	Quote motor number	Donnez le numéro du moteur	Motornummer angeben	Citare il numero di serie de motore

Directives and CE marking



Directive	Description
73/23/EEC 93/68/EEC	Low Voltage Directive (LVD): motors are CE marked in compliance Amendment to LVD
98/37/EC	Machinery Directive: motors are outside of scope
89/336/EEC 92/31/EEC 93/68/EEC }	Electro Magnetic Compatibility Directive (EMC): motors comply Amendments to EMC
94/9/EC	ATEX Directive for hazardous atmospheres (where applicable)

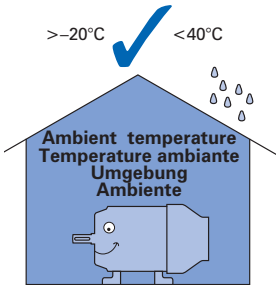
	Hazardous areas	Zones dangereuses	Gefahrenbereiche	Aree pericolose
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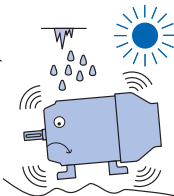
If motors are marked by any of the 4 symbols, special conditions apply
 Si les moteurs portent l'un des 4 symboles indiqués, des conditions spéciales seront applicables
 Wenn Motoren mit einem der 4 Symbole markiert sind, gelten Sonderbedingungen
 Se i motori sono contrassegnati da uno dei 4 simboli, significa che delle condizioni speciali sono applicabili

- Refer to:
 - a) Spare parts, installation and maintance leaflet
 - b) Constructional standards
 - c) The approval certificate
 - d) Codes of practice*All operations must be carried out by appropriately trained personnel*
- Se reporter à:
 - a) Pieces detachées, brochure d'installation et maintance
 - b) Normes de construction
 - c) Certificat d'homologation
 - d) Codes de déontologie*Toutes les manoeuvres doivent être effectuées par un personnel ayant reçu une formation appropriée*
- Bitte nachschlagen in:
 - a) Ersatzteile, Betriebs- und Wartungsanleitung
 - b) Baunormen
 - b) Zulassungsbescheinigung
 - c) Richtlinien*Alle Arbeiten müssen von entsprechend geschultem Personal ausgeführt werden*
- Fare riferimento a:
 - a) Parti di ricambio, catalogo uso e manutenzione
 - b) Normative di costruzione
 - b) Il certificato di approvazione
 - c) I codici di*Tutte le operazioni devono essere effettuate da personale qualificato*

	Storage	Stockage	Lagerung	Immagazzinggio
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<-20°C ✗ >40°C



✓ Energise heaters if fitted or use desiccant

✓ Falls vorhanden, Heizgeräte einschalten, sonst Trockenmittel verwenden

✗ Vibration

✗ Vibration

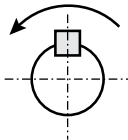
✓ Mettre sous tension les réchauffeurs si installés ou utiliser un déshydratant

✓ Alimentare i riscaldatori se montati od usare un essiccante

✗ Vibration

✗ Vibrazione

Periodic Requirements
 Obligations périodiques
 Regelmässig durchzuführende Überprüfungen
 Fabbisogni periodici



1 week: rotate shaft approximately 90°
 Toutes les semaines: rotation de l'arbre 90° environ
 Wöchentlich: Welle mit Hand drehen ungefähr 90°
 OGNI settimana: Ruotare l'albero di 90° gradi

3 months check insulation resistance if less than 10MΩ dry out.
 Tous les 3 mois vérifiez la résistance d'isolement, si inférieur à 10MΩ, étuver le bobinage.
 Vierteljährlich Isolationswiderstand prüfen. Wenn unter 10MΩ, Wicklung trocknen.
 Ogni 3 mesi: Controllare la resistenza d'isolamento.



<i>Directive</i>	<i>Description</i>
73/23/EEC 93/68/EEC	Directive basse tension: la conformité des moteurs est indiquée par la marque CE Modification à la Directive basse tension
98/37/EC	Directive machines: les moteurs ne sont pas compris dans les limites de cette directive
89/336/EEC 92/31/EEC 93/68/EEC }	Directive sur la compatibilité électromagnétique: conformité des moteurs Modifications à la Directive sur la compatibilité électromagnétique
94/9/EC	Directive ATEX pour zones explosibles en cas d'application

<i>Richtlinie</i>	<i>Beschreibung</i>
72/23/EWG 93/68/EWG	Niederspannungsrichtlinie: die Motoren werden in Erfüllung der Richtlinie mit „CE“ gekennzeichnet Änderung zu Niederspannungsrichtlinie
98/37/EG	Maschinenrichtlinie: die Motoren fallen nicht unter den Anwendungsbereich
89/336/EWG 92/31/EWG 93/68/EWG }	Richtlinie über elektromagnetische Verträglichkeit: die Motoren erfüllen sie Änderung zu Richtlinie über elektromagnetische Verträglichkeit
94/9/EC	ATEX-Bestimmungen bei explosionsgefährdeten Umgebungen soweit zutreffend

<i>Direttiva</i>	<i>Descrizione</i>
93/23/EEC 93/68/EEC	Direttiva sulle basse tensioni: I motori hanno la relativa certificazione CE Emendamento della Direttiva sulle basse tensioni
98/37/EC	Direttiva sui macchinari: i motori sono fuori da questo ambito
89/336/EEC 92/31/EEC 93/68/EEC }	Direttiva sulla compatibilità elettromagnetica Rispettata emendamento della Direttiva sulla compatibilità elettromagnetica
94/9/EC	Normativa ATEX per ambienti pericolosi per quanto applicabile

Inspection Sheet

AP-0106-004


Order no.: 0002647089

PA-no.: 1116236

Fan type: AJ 710-9/38 °-2(K)

Fan-/Motor no.: VENT751-KC740448

Motor brand: Brook Crompton

Temperature class:	☐ 40 °C	☐ 200 °C/2h	☐ 250 °C/1h	☒ 250 °C/2h	☐ 300 °C/2h	☐ 400 °C/2h	☐ Other:	55 °C
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Motor data:	U [V]	f [Hz]	I [A]	P [OutputkW]	n [1/min]	IP	ISO	Cos φ:
	400/690	50	58,6/34,0	34,0	2935	55	H	0,9

Connection:	☒ Y	☒ D	☐ YY	☐	☒ single-/	☐ two-speed	☐ 1~	☒ 3~
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Measured data:							
f [Hz] / number of poles	Phasen	U [V]	I [A]	P [Input kW]			
Form B / Impeller first, then motor					Unit vibrations in tolerance to ISO 10816-1		ok
50 / 2	L1	386,2	55,16	34,04			
	L2	386,6	56,23				
	L3	387	55,84	54,6			

Miscellaneous:			
Motor protection:	☐ yes	☒ no	Isolator: ☐ yes ☒ no
	☐ TK	☐ PTC	Motor heater 230 V: ☐ yes ☒ no
Visual inspection Ok:	☒ yes	☐ no	Bearings Ok: ☒ yes ☐ no
Rotation direction:		☒ ok	

	set value:	actual value:	Testing according EN 60204-1: ☒ yes ☐ no
Minimum Tip gap [mm]:	4,00	☒ ok	Protection earth conductor (PE): ☒ ok
			High voltage (HVAC): ☒ ok

Notice:

Signature tester / date:

23.04.13

Manuel Kaibel

Order no.: 0002647089

PA-no.: 1116237

Fan type: AJ 710-9/38 °-2(K)

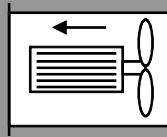
Fan-/Motor no.: VENT754-KC740582

Motor brand: Brook Crompton

Temperature class:	☐ 40 °C	☐ 200 °C/2h	☐ 250 °C/1h	☒ 250 °C/2h	☐ 300 °C/2h	☐ 400 °C/2h	☐ Other:	55 °C
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Motor data:	U [V]	f [Hz]	I [A]	P [OutputkW]	n [1/min]	IP	ISO	Cos φ:
	400/690	50	58,6/34,0	34,0	2935	55	H	0,9

Connection:	☒ Y	☒ D	☐ YY	☐	☒ single-/	☐ two-speed	☐ 1~	☒ 3~
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Measured data:							
f [Hz] / number of poles	Phasen	U [V]	I [A]	P [Input kW]			
Form B / Impeller first, then motor					Unit vibrations in tolerance to ISO 10816-1		ok
50 / 2	L1	386,9	55,56	33,91			
	L2	387,6	55	I [A] @ 400V			
	L3	387	56,02	54,4			

Miscellaneous:			
Motor protection:	☐ yes	☒ no	Isolator: ☐ yes ☒ no
	☐ TK	☐ PTC	Motor heater 230 V: ☐ yes ☒ no
Visual inspection Ok:	☒ yes	☐ no	Bearings Ok: ☒ yes ☐ no
Rotation direction:		☒ ok	

	set value:	actual value:	Testing according EN 60204-1: ☒ yes ☐ no
Minimum Tip gap [mm]:	4,00	☒ ok	Protection earth conductor (PE): ☒ ok
			High voltage (HVAC): ☒ ok

Notice:

Signature tester / date:

23.04.13

Manuel Kaibel

Order no.: 0002647089

PA-no.: 1116237

Fan type: AJ 710-9/38°-2(K)

Fan-/Motor no.: VENT752-KC740640

Motor brand:

Brook Crompton

Temperature class:		40 °C	200 °C/2h	250 °C/1h	250 °C/2h	300 °C/2h	400 °C/2h	Other:	55 °C
Motor data:		U [V]	f [Hz]	I [A]	P [OutputkW]	n [1/min]	IP	ISO	Cos φ:
		400/690	50	58,6/34,0	34,0	2935	55	H	0,9
Connection:		☒ Y	☒ D	☐ YY	☐	☒ single-/ ☐ two-speed		☐ 1~	☒ 3~
Measured data:									
f [Hz] / number of poles		Phasen	U [V]	I [A]					
Form B / Impeller first, then motor					Unit vibrations in tolerance to ISO 10816-1		ok		
50 / 2		L1	388,9	53,78	33,17				
	L2	389,4	54,58	I [A] @ 400V					
	L3	389,6	54,19	53,2					

Miscellaneous:					
Motor protection:	☐ yes	☒ no	Isolator:	☐ yes	☒ no
	☐ TK	☐ PTC	Motor heater 230 V:	☐ yes	☒ no
Visual inspection Ok:	☒ yes	☐ no	Bearings Ok:	☒ yes	☐ no
Rotation direction:	☒ ok				

	set value:	actual value:	Testing according EN 60204-1: ☒ yes ☐ no
Minimum Tip gap [mm]:	4,00	☒ ok	Protection earth conductor (PE): ☒ ok High voltage (HVAC): ☒ ok

Notice:	
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Signature tester / date:

23.04.13

Manuel Kaibel

Order no.: 0002647089

PA-no.: 1116237

Fan type: AJ 710-9/38 °-2(K)

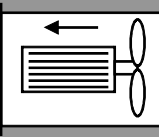
Fan-/Motor no.: VENT753-KC740448

Motor brand: Brook Crompton

Temperature class:	☐ 40 °C	☐ 200 °C/2h	☐ 250 °C/1h	☒ 250 °C/2h	☐ 300 °C/2h	☐ 400 °C/2h	☐ Other:	55 °C
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Motor data:	U [V]	f [Hz]	I [A]	P [OutputkW]	n [1/min]	IP	ISO	Cos φ:
	400/690	50	58,6/34,0	34,0	2935	55	H	0,9

Connection:	☒ Y	☒ D	☐ YY	☐	☒ single-/	☐ two-speed	☐ 1~	☒ 3~
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Measured data:							
f [Hz] / number of poles	Phasen	U [V]	I [A]	P [Input kW]			
Form B / Impeller first, then motor					Unit vibrations in tolerance to ISO 10816-1		ok
50 / 2	L1	390,7	53,77	32,85			
	L2	391	53,63				
	L3	391,1	53,47	52,7			

Miscellaneous:			
Motor protection:	☐ yes	☒ no	Isolator: ☐ yes ☒ no
	☐ TK	☐ PTC	Motor heater 230 V: ☐ yes ☒ no
Visual inspection Ok:	☒ yes	☐ no	Bearings Ok: ☒ yes ☐ no
Rotation direction:		☒ ok	

	set value:	actual value:	Testing according EN 60204-1: ☒ yes ☐ no
Minimum Tip gap [mm]:	4,00	☒ ok	Protection earth conductor (PE): ☒ ok
			High voltage (HVAC): ☒ ok

Notice:

Signature tester / date:

23.04.13

Manuel Kaibel

Der Hersteller:
The Manufacturer

Systemair GmbH
Seehöfer Str. 45
D-97944 Windischbuch
Tel.: +49-79 30 / 92 72-0

erklärt hiermit, dass folgende Produkte:
certified herewith that the following products:

Produktbezeichnung:
product designation

Axialventilatoren
Axial fans

Typenbezeichnung:
type designation

AXC; AXC (K); AXC (B); AXC (F); AXC-G; AXC (B)-G; AXC-P; AXC (B)-P
AXR; AXR (K); AXR (B); AXR (F); AXCBF; HA; HA(B); HA(F); HA(F)-G; HA(F)-P; HABV;
AJ; AJ (K); AJ (B); AJ (F); AJ-TR; AR; AW

Baujahr:
year of manufacture

2012

allen einschlägigen Bestimmungen der Richtlinie Maschinen RL 2006/42/EG entspricht.
ensure all relevant regulations of machinery directive electrical equipment RL 2006/42/EG.

Die Maschine entspricht weiterhin allen Bestimmungen der Richtlinien Elektrische Betriebsmittel (2006/95/EG) und Elektromagnetische Verträglichkeit (EMV) (2004/108/EG).
The products ensure furthermore all regulations of directives electrical equipment and electromagnetic compatibility (EMC) (2004/108/EG).

Folgende harmonisierte Normen wurden angewandt:
The following standards are used:

EN ISO 12100-1:2003	Sicherheit von Maschinen - Grundbegriffe, allgemeine Gestaltungsleitsätze, Teil 1: Grundsätzliche Terminologie, Methodik <i>Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology</i>
EN ISO 12100-2:2003	Sicherheit von Maschinen - Grundbegriffe, allgemeine Gestaltungsleitsätze, Teil 2: Technische Leitsätze und Spezifikationen <i>Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles</i>
EN ISO 13857:2008	Sicherheit von Maschinen - Sicherheitsabstände gegen das Erreichen von Gefahrstellen mit den oberen und unteren Gliedmaßen <i>Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs</i>
EN 60204-1:2006	Sicherheit von Maschinen - Elektrische Ausrüstungen von Maschinen, Teil 1: Allgemeine Anforderungen <i>Safety of machinery - Electrical equipment of machines - Part 1: General requirements</i>
DIN EN 61000-6-1:2007	Elektromagnetische Verträglichkeit (EMV) - Teil 6-1: Fachgrundnormen - Störfestigkeit für Wohnbereich, Geschäfts- und Gewerbebereiche sowie Kleinbetriebe <i>Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments</i>
DIN EN 61000-6-2:2005	Elektromagnetische Verträglichkeit (EMV) - Teil 6-2: Fachgrundnormen - Störfestigkeit für Industriebereiche <i>Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments</i>

Boxberg,

30.12.2011
Datum/date


ppa. Harald Rudelgass, Technischer Leiter
ppa. Harald Rudelgass, Technical director



Management Service

CERTIFICATE

The Certification Body
of TÜV SÜD Management Service GmbH
certifies that



Systemair GmbH
Seehöfer Str. 45, D-97944 Boxberg
Pankstraße 8-10, D-13127 Berlin

has established and applies
a Quality Management System for

**Development, planning, production and sales of
air handling and ventilation systems**

An audit was performed, Report No. **70722819**
Proof has been furnished that the requirements
according to

ISO 9001:2008

are fulfilled. The certificate is valid until **2015-09-19**
Certificate Registration No. **12 100 31405 TMS**

M. Wegner



Munich, 2012-09-20

QMS-TGA-ZM-07-92