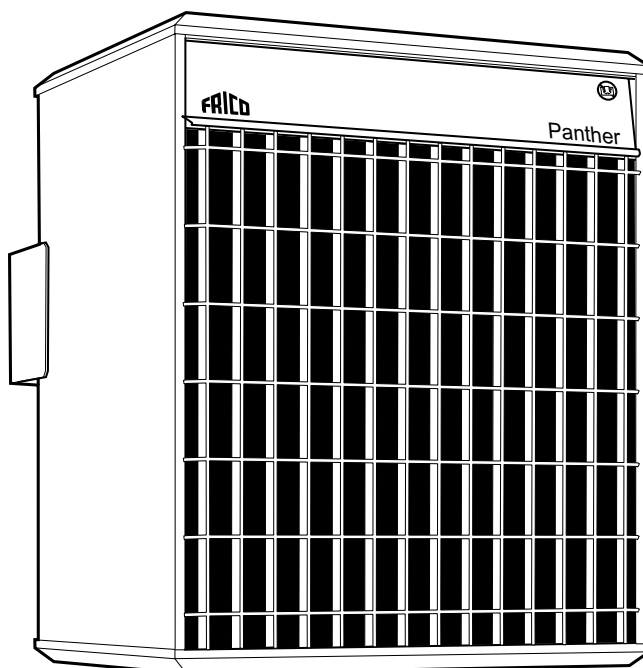


Original instructions

Panther T



EN ... 16

FR ... 19

DE ... 22

SE ... 25

NO ... 27

DK ... 29

FI ... 32

NL ... 34

ES ... 37

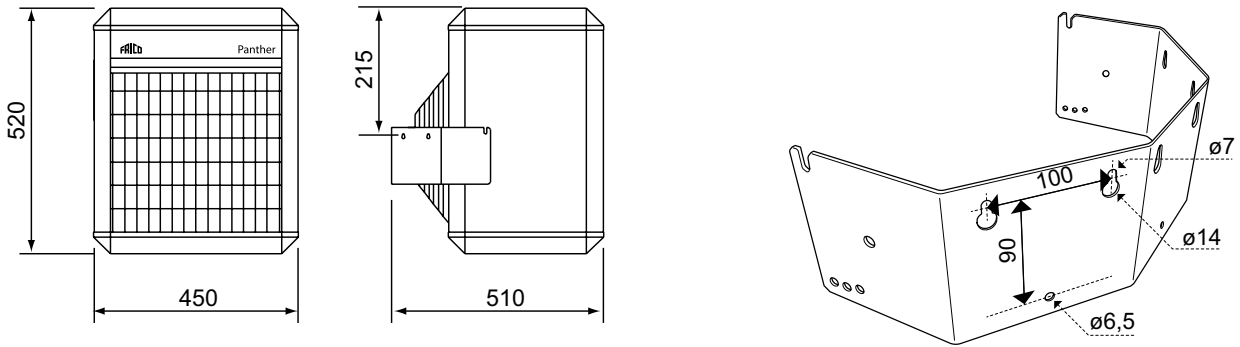
IT ... 40

PL ... 43

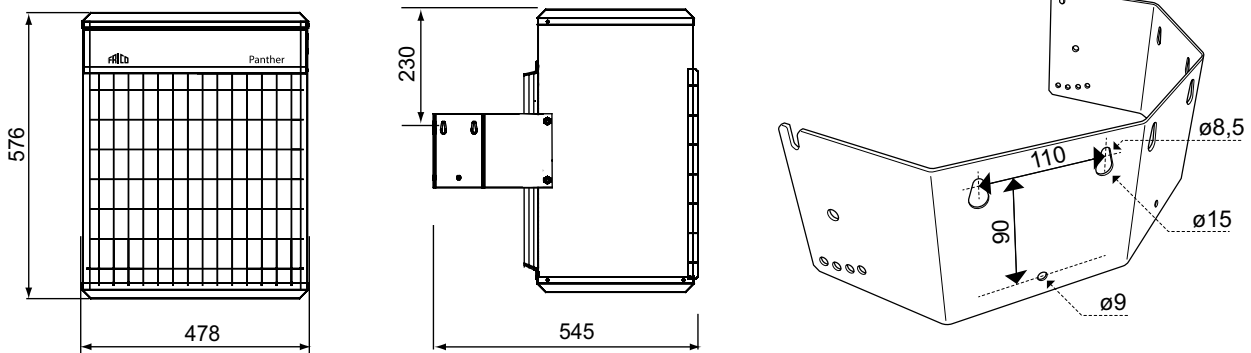
RU ... 46

Panther T

Panther T 13,5-15 kW (PNT135, PNT15)

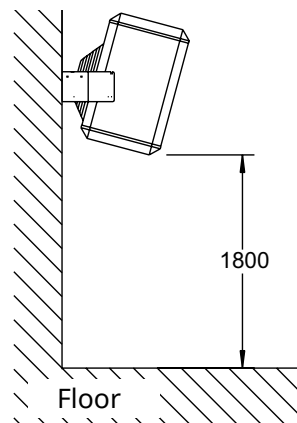
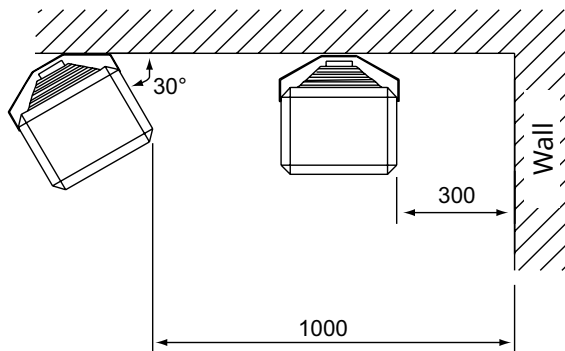


Panther T 20-30 kW (PNT20, PNT30, PNT305)

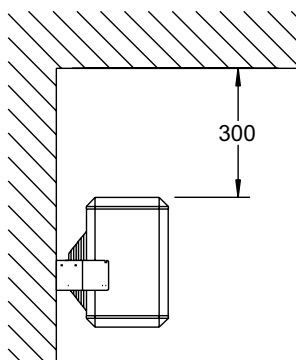


Minimum mounting distance

Wall



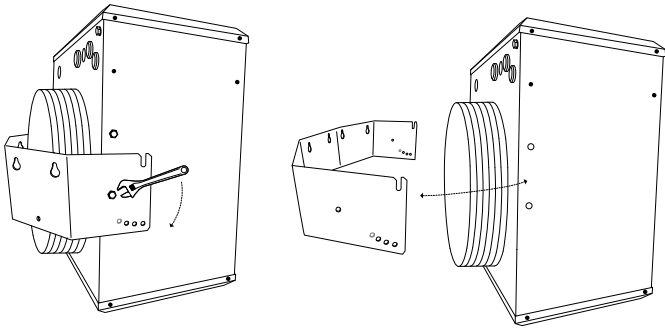
Ceiling



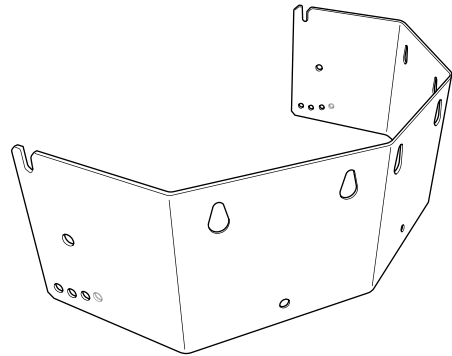
- FR: Distances minimales
- DE: Mindestabstand
- SE: Minimavstånd
- NO: Minsteavstand
- DK: Minimumsafstande
- FI: Minimietäisyydet
- NL: Minimale afstand
- ES: Distancias mínimas
- IT: Distanze minime
- PL: Minimalne odległości
- RU: Минимальные расстояния при установке

Panther T

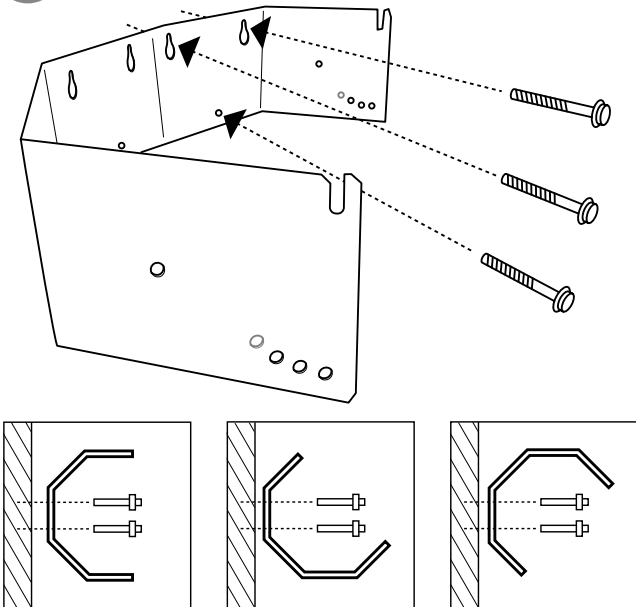
1 Detach bracket from the unit



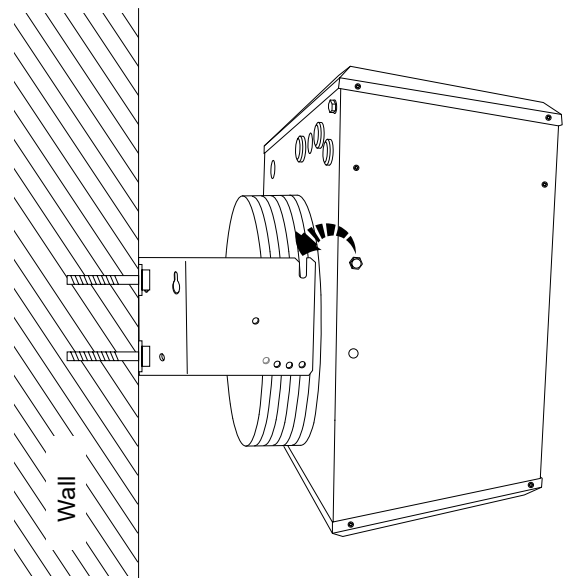
2 Mark and drill holes



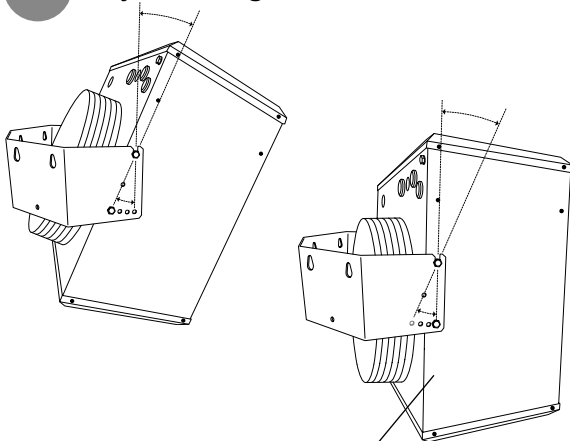
3 Mount the bracket on the wall



4 Hang the unit on the bracket



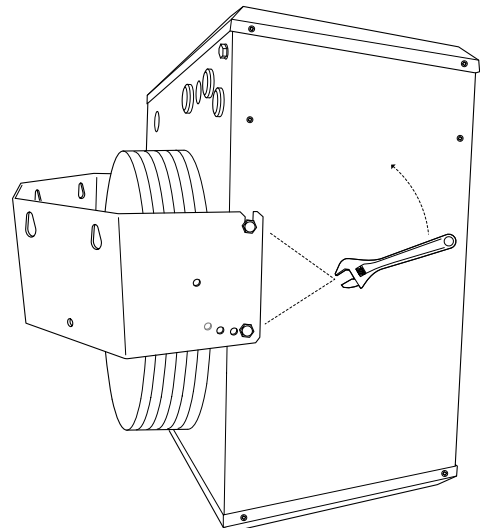
5 Adjust the angle and fasten with screws



PNT135/15: 0° - 7,5° - 15°

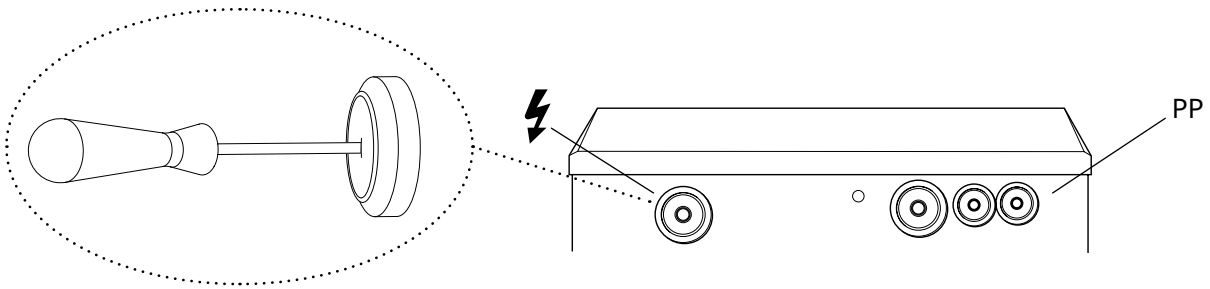
PNT20/30/305: 0° - 7,5° - 15° - 23°

6 Tighten all screws

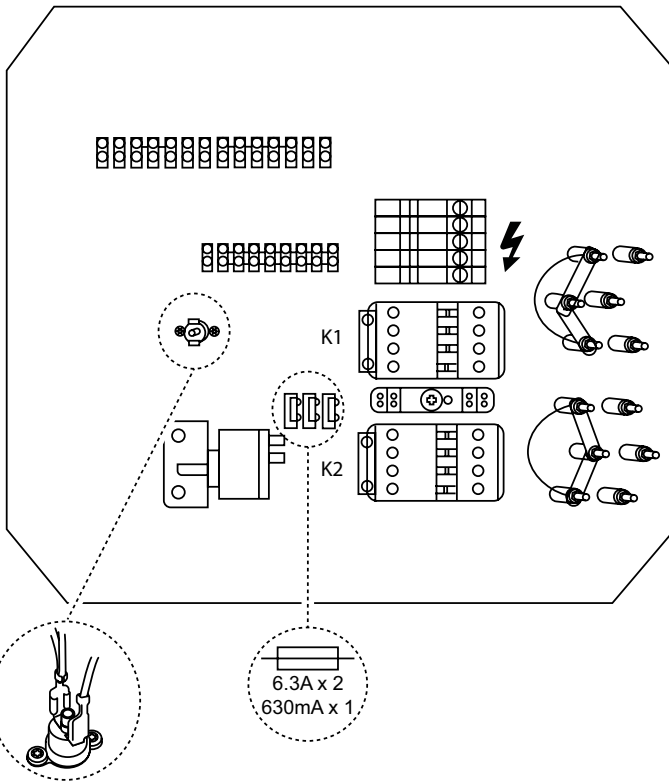


Panther T

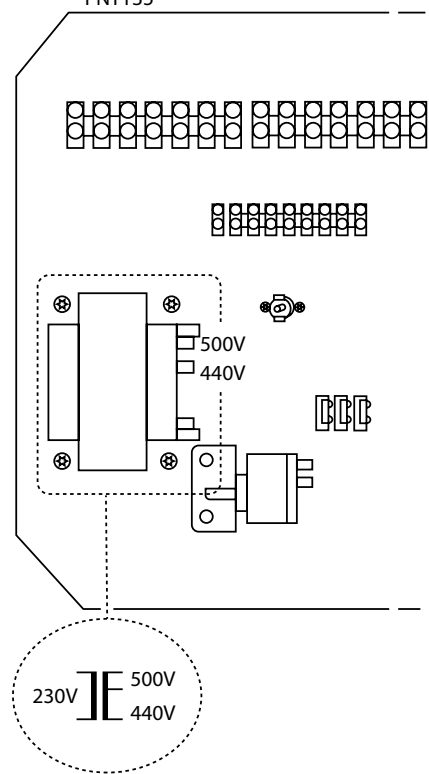
Connection



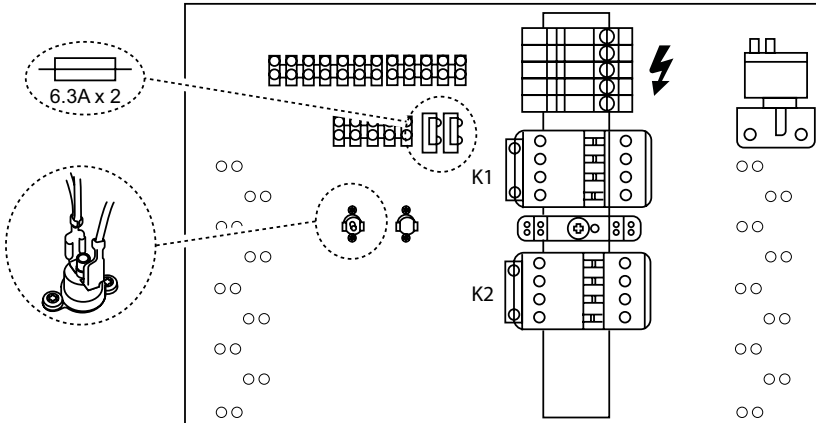
PNT15



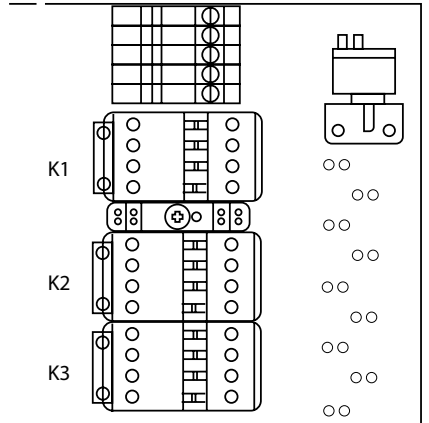
PNT135



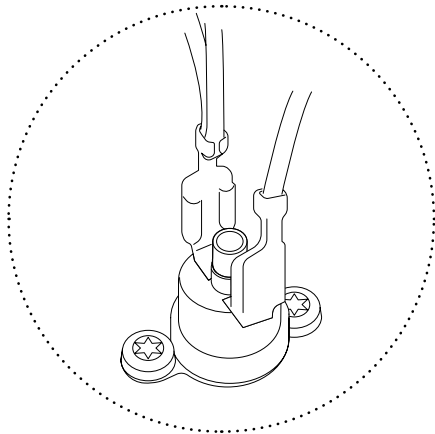
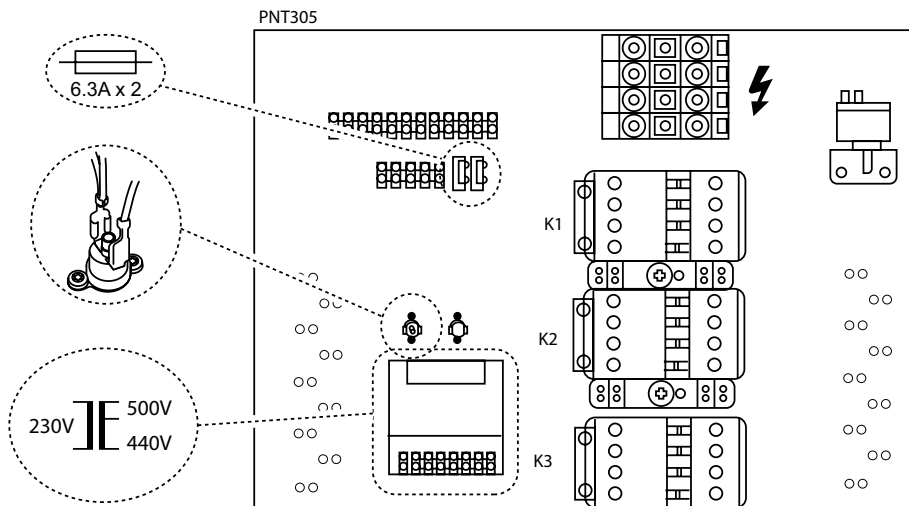
PNT20



PNT30



Panther T



Resetting the overheat protection

- FR: Réinitialisation de la protection anti-surchauffe
- DE: Zurücksetzen des Überhitzungsschutzes
- SE: Återställning överhettningsskydd
- NO: Tilbakestille overopphetingsvernet
- DK: Nulstilling af overophedningsbeskyttelsen
- FI: Ylikuumenemissuojan palauttaminen
- NL: Resetten van de oververhittingsbeveiliging
- ES: Reajustar la protección contra el sobrecalentamiento
- IT: Ripristino della protezione termica
- PL: Resetowanie zabezpieczenia przed przegrzaniem
- RU: Перезапуск защиты от перегрева

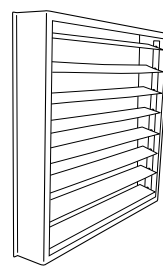
Item number	Type	Voltage [V]	Minimal Cross section cable [mm ²]	Nominal Cross section for terminal block [mm ²]
334023	PNT15	400V3N~	6	16
		230V3~	16	
334024	PNT20	400V3N~	10	35
334025	PNT30	400V3N~	16	35
334030	PNT135	440V3~	4	16
		500V3~	2,5	
334034	PNT305	440V3~	16	35
		500V3~	16	

- FR: Section transversale minimale du câble. Section transversale nominale du bornier.
- DE: Mindestquerschnitt Kabel. Nennquerschnitt Klemmleiste.
- SE: Minsta kabelarea. Nominell area inkopplingsplint.
- NO: Minste kabelareal. Nominelt areal rekkeklemme.
- DK: Minimalt tværsnit af kabel. Nominelt tværsnit for rækkelemme.
- FI: Kaapelin pienin poikkipinta-ala. Liitinriman nimellispoikkipinta-ala.
- NL: Minimale doorsnede kabel. Nominale doorsnede klemmenstrook.
- ES: Sección transversal mínima Cable. Sección transversal nominal Bloque de bornas.
- IT: Cavo con sezione trasversale minima. Sezione nominale morsettiera.
- PL: Minimalny przekrój przewodu. Nominalny przekrój listwy zaciskowej.
- RU: Минимальное сечение силового кабеля. Макс. сечение кабеля для гнезда клеммника.

Panther T

Accessories

Item number	Type	Used for	HxWxD [mm]
10274	PLR15	PNT135, PNT15	355x355x60
10275	PLR30	PNT20, PNT30, PNT305	415x445x60

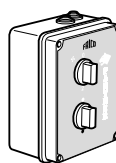


PLR15/30

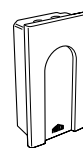
Controls for installations not covered by the Ecodesign Regulation (EU) 2015/1188

The fan heater must be supplemented with a control panel PP.

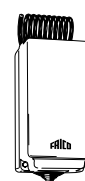
Item number	Type	Used for	HxWxD [mm]
94730	PP15N	PNT135, PNT15	160x120x96
449201	PP21 *1	PNT20	160x120x96
449203	PP31 *1	PNT30, PNT305	160x120x96
10231	RTI2	PNT	155x83x47
5989	KRT2800	PNT	165x57x60
10281	PTA01 *2	PNT	215x185x115



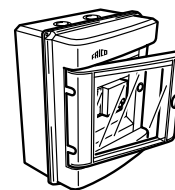
PP



RTI2



KRT2800



PTA01

*1) See www.frico.net

*2) See separate manual

FR: L'aérotherme nécessite également un boîtier de commande PP.

DE: Der Heizlüfter muss mit einem PP-Steuergerät ergänzt werden.

SE: Värmeflåkten måste kompletteras med manöverpanel PP.

NO: Varmluftsviften må suppleres med et kontrollpanel PP.

DK: Varmeblæseren skal suppleres med et PP-betjeningspanel.

FI: Puhallinlämmitin on varustettava PP-ohjauspaneelilla.

NL: De luchtverhitter moet worden aangevuld met een regelpaneel PP.

ES: El aerotermino debe completarse con un panel de control PP.

IT: Occorre integrare il termoventilatore con un PP del pannello di controllo.

PL: Nagrzewnicę należy wyposażyć w panel sterowania PP.

RU: Тепловентилятор должен быть дополнен панелью управления PP.

FR: Régulations pour les installations non couvertes par la réglementation relative à l'écoconception (UE) 2015/1188

DE: Steuerungen für Installationen, die nicht unter die Ökodesign-Verordnung (EU) 2015/1188 fallen

SE: Regleringar för installationer som inte omfattas av Ecodesign, förordning (EU) 2015/1188

NO: Reguleringsløsninger for installasjoner som ikke dekkes av Økodesigndirektivet (EU) 2015/1188

DK: Stylinger til installationer, der ikke er omfattet af Ecodesign-regulativet (EU) 2015/1188

FI: Ohjausratkaisut asennuksiin, joita Ecodesign-asetus (EU) 2015/1188 ei käsittelee

NL: Regelaars voor installaties die niet vallen onder de eco-designverordening (EG) 2015/1188

ES: Controles para instalaciones no cubiertas por el Reglamento (UE) 2015/1188 sobre diseño ecológico

IT: Controlli per gli impianti non inclusi dal Regolamento sulla progettazione ecocompatibile (UE) 2015/1188

PL: Systemy sterowania dla instalacji nie objętych Rozporządzeniem (UE) 2015/1188 dotyczącym ekoprojektu

RU: Приборы управления для установок оборудования, не подпадающих под нормы требований Экодизайн (EU) 2015/1188

Panther T

Panther T (IP44)

Item number	Type	Output steps [kW]	Airflow [m ³ /h]	Sound power *1 [dB(A)]	Sound pressure*2 [dB(A)]	Δt*3 [°C]	Motor [W]	Voltage [V]	Amperage [A]	Weight [kg]
334023	PNT15	0/7,5/15	900/1300	61	39/47	50/35	70	400V3N~*4 230V3~	21,7 37,5	22
334024	PNT20	0/10/20	2300	71	55	26	120	400V3N~	29,5	25
334025	PNT30	0/10/20/30	2300	71	55	39	120	400V3N~	43,9	28
334030	PNT135	0/5/10 0/7/13,5	900/1300	61	39/47	45/31	70	440V3~*5 500V3~	13,4 15,6	24
334034	PNT305	0/7,5/15/23 0/10/20/30	2300	71	55	39	120	440V3~*5 500V3~	30,8 35,1	33

*1) Sound power (L_{WA}) measurements according to ISO 27327-2: 2014, Installation type E.

*2) Sound pressure (L_{pA}). Conditions: Distance to the unit 3 metres. Directional factor: 2. Equivalent absorption area: 200 m². At lowest/highest airflow (when applicable).

*3) Δt = temperature rise of passing air at maximum heat output. At lowest/highest airflow (when applicable).

*4) Delivered for 400V3N~, can be connected to 230V3~.

*5) Can be connected to both 440V3~ and 500V3~.

Approved for 380V/3ph/60Hz. Product performance for 380V/3ph/60Hz will differ from stated data.



EN: Output steps

FR: Puissances

DE: Abgabestufen

SE: Effektsteg

NO: Effekttrinn

DK: Effekttrin

FI: Tehoportaat

NL: Capaciteit

ES: Niveles de potencia

IT: Stadi potenza

PL: Stopnie mocy

RU: Ур. мощности

EN: Sound power

FR: Puissance acoustique

DE: Schalleistung

SE: Ljudeffekt

NO: Lydeffekt

DK: Lydeffekt

FI: Ääniteho

NL: Geluidsvermogen

ES: Potencia acústica

IT: Potenza sonora

PL: Moc akustyczna

RU: Мощность звука

EN: Motor

FR: Moteur

DE: Motor

SE: Motor

NO: Motor

DK: Motor

FI: Moottori

NL: Motor

ES: Motor

IT: Motore

PL: Silnika

RU: двигатель

EN: Amperage

FR: Intensité

DE: Strom

SE: Ström

NO: Strøm

DK: Strømstyrke

FI: Virta

NL: Stroomsterkte

ES: Intensidad

IT: Corrente

PL: Natężenie

RU: Сила тока

EN: Airflow

FR: Débit d'air

DE: Luftmenge

SE: Luftflöde

NO: Luftstrøm

DK: Luftmængde

FI: Ilmavirta

NL: Luchtstroom

ES: Caudal de aire

IT: Portata aria

PL: Wydajność powietrza

RU: Расх.возд.

EN: Sound pressure

FR: Pression acoustique

DE: Schalldruck

SE: Ljudtryck

NO: Lydtrykk

DK: Lydtryk

FI: Äänenpaine

NL: Geluidsdruk

ES: Presión acústica

IT: Pressione sonora

PL: Ciśnienie akustyczne

RU: Звуковое давление

EN: Voltage

FR: Tension

DE: Spannung

SE: Spänning

NO: Spenning

DK: Spænding

FI: Jännite

NL: Voltage

ES: Tensión

IT: Tensione

PL: Napięcie

RU: Напряжение

EN: Weight

FR: Poids

DE: Gewicht

SE: Vikt

NO: Vekt

DK: Vægt

FI: Paino

NL: Gewicht

ES: Peso

IT: 0 Peso

PL: Masa

RU: Bec

FR

*1) Mesures de la puissance acoustique (L_{WA}) selon la norme ISO 27327-2 : 2014, Installation de type E.

*2) Pression acoustique (L_{pA}). Conditions : Distance de l'appareil : 3 mètres. Facteur directionnel : 2. Surface d'absorption : 200 m². Au débit d'air minimal/maximal (le cas échéant).

*3) Δt = augmentation de température du débit d'air sous une puissance maximale. Au débit d'air minimal/maximal (le cas échéant).

*4) Livré en version 400V3N~, raccordement 230V3~ possible. *5) Peut être connecté 440V3~ ou 500V3~.

DE

*1) Schallleistungsmessungen (L_{WA}) gemäß ISO 27327-2: 2014, Installationstyp E.

*2) Schalldruck (L_{pA}). Bedingungen: Abstand zum Gerät: 3 Meter. Richtungsfaktor: 2. Entsprechende Absorptionsfläche: 200 m². Bei minimalem/maximalem Volumenstrom (falls zutreffend).

*3) Δt = Temperaturanstieg der vorbeiströmenden Luft bei max. Heizleistung. Bei minimalem/maximalem Volumenstrom (falls zutreffend).

*4) Geliefert für 400V3N~, ermöglicht Anschluss an 230V3~. *5) Kann an 440V3~ und an 500V3 angeschlossen werden.

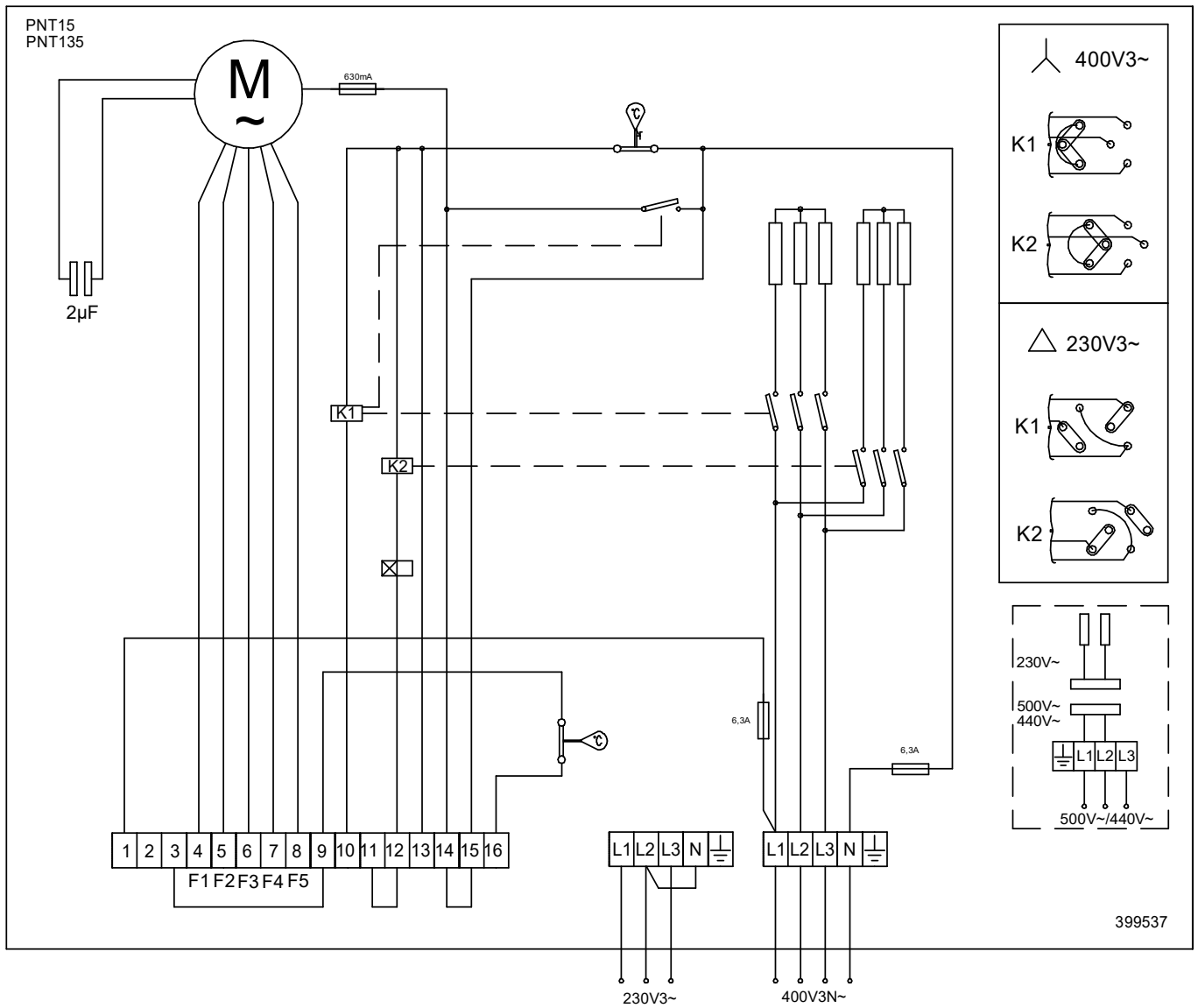
Panther T

- (SE) *¹) Ljudeffekt (L_{WA}), mätningar enligt ISO 27327-2: 2014, Installationstyp E.
*²) Ljudtryck (L_{pA}). Förutsättningar: Avstånd till aggregat 3 meter. Riktningfaktor: 2. Ekvivalent absorptionsarea 200 m². Vid lägst/högst luftflöde (när tillämpligt).
*³) Δt = temperaturhöjning på genomgående luft vid maximal värmeeffekt. Vid lägst/högst luftflöde (när tillämpligt). *⁴) Levereras för 400V3N~, kan kopplas till 230V3~. *⁵) Kan anslutas till 440V3~ och 500V3~.
- (NO) *¹) Målinger av lydeffekt (L_{WA}) i henhold til ISO 27327-2: 2014, Installasjon type E.
*²) Lydtrykk (L_{pA}). Betingelser: Avstand til aggregat 3 meter. Retningsfaktor: 2. Ekvivalent absorpsjonsareal: 200 m². Ved lav/høy luftmengde (hvis aktuelt).
*³) Δt = temperaturøkning på gjennomstrømmende luft ved maksimal varmeeffekt. Ved lav/høy luftmengde (hvis aktuelt). *⁴) Levert for 400V3N~, kan kobles til 230V3~.. *⁵) Omkoblingsbar.
- (DK) *¹) Lydeffektmålinger (L_{WA}) i henhold til ISO 27327-2: 2014, Installationstype E.
*²) Lydtryk (L_{pA}). Forhold: Afstand til enheden; 3 meter. Retningsfaktor: 2. Tilsvarende absorberingsområde: 200 m². Ved laveste/højeste luftmængde (hvor relevant).
*³) Δt = temperaturstigning i passerende luft ved maksimal varmeeffekt. Ved laveste/højeste luftmængde (hvor relevant). *⁴) Leveres til 400V3N~, kan tilsluttes 230V3~. *⁵) Kan tilsluttes 440V3~ og 500V3~.
- (FI) *¹) Äänitehon (L_{WA}) testausmenetelmät standardin ISO 27327-2: 2014 mukaan, asennustyyppi E.
*²) Äänenpaine (L_{pA}). Mittausjärjestelyt: Etäisyys laitteeseen 3 m. Suuntaavuuskerroin 2. Ekvivalentti absorptioala: 200 m². Pienin/suurin ilmamäärä (kun käytettävissä).
*³) Δt = läpivirtaavan ilman lämpötilan nousu suurimmalla lämpöteholla. Pienin/suurin ilmamäärä (kun käytettävissä). *⁴) Toimitettaessa 400V3N~, voidaan kytkeä 230V3~. *⁵) Voidaan kytkeä 440V3~ ja 500V3~ jännitteeseen.
- (NL) *¹) Metingen van het geluidsvermogen (L_{WA}) volgens ISO 27327-2: 2014, installatietype E.
*²) Geluidsdruk (L_{pA}). Condities: Afstand tot de unit 3 meter. Richtingsfactor: 2. Equivalent absorptiegebied: 200 m². Bij laagste/hoogste luchtstroom (indien van toepassing).
*³) Δt = temperatuurstijging van de passerende lucht op maximale warmte-output. Bij laagste/hoogste luchtstroom (indien van toepassing). *⁴) Geleverd voor 400V3N~, kan worden aangesloten op 230V3~. *⁵) Kan aangesloten worden met 440V3~ of 500V3~.
- (ES) *¹) Mediciones de potencia acústica (L_{WA}) de conformidad con ISO 27327-2: 2014, Instalación de tipo E.
*²) Presión acústica (L_{pA}). Condiciones: 3 metros de distancia a la unidad. Factor direccional: 2. Área de absorción equivalente: 200 m². Al caudal de aire mín./máx (donde proceda).
*³) Δt = Incremento de la temperatura a la potencia calorífica máxima. Al caudal de aire mín./máx (donde proceda). *⁴) Entregados para 400V3N~, pueden conectarse a 230V3~. *⁵) Se puede conectar tanto a 440V3~ como a 500V3~.
Puede utilizarse a 380V/3ph/60Hz. Los datos técnicos para 380V/3ph/60Hz son diferentes a los aquí indicados.
- (IT) *¹) Misurazioni della potenza sonora (L_{WA}) in conformità con ISO 27327-2: 2014, Tipo di installazione E.
*²) Pressione sonora (L_{pA}). Condizioni: distanza dall'unità 3 metri. Fattore direzionale: 2. Superficie di assorbimento equivalente: 200 m². Alla portata minima/massima (ove applicabile).
*³) Δt = innalzamento della temperatura dell'aria in transito alla massima potenza termica. Alla portata minima/massima (ove applicabile). *⁴) Fornito per 400V3N~, può essere collegato a 230 V~ trifase. *⁵) Può essere collegato sia a 440V3~ che a 500V3~.
- (PL) *¹) Pomiar mocy akustycznej (L_{WA}) zgodnie z normą ISO 27327-2: 2014, Instalacja typu E.
*²) Ciśnienie akustyczne (L_{pA}). Warunki: Odległość do urządzenia 3 m. Współczynnik kierunkowy: 2. Powierzchnia absorpcji: 200 m². Przy najniższym/najwyższym przepływie powietrza (jeśli dotyczy).
*³) Δt = przyrost temperatury przy maksymalnej mocy grzewczej. Przy najniższym/najwyższym przepływie powietrza (jeśli dotyczy). *⁴) Przystosowane fabrycznie do zasilania 400V3N~. Możliwość podłączenia do zasilania 230V3~. *⁵) Można podłączyć do zasilania 440V3~ i 500V3~.
- (RU) *¹) Мощность звука (L_{WA}) измерена в соответствии с ISO 27327-2: 2014, Тип установки E.
*²) Звуковое давление (L_{pA}). Условия: Расстояние до прибора 3 метра. Фактор направленности 2. Эквивалентная площадь звукопоглощения 200 м². При самом низком/высоком расходе воздуха (где применимо).
*³) Δt = подогрев потока при максимальной мощности. При самом низком/высоком расходе воздуха (где применимо).
*⁴) Поставляется с коммутацией под напряжение 400В 3фазы с нейтралью, но может быть перекоммутирован под напряжение 230В3~. *⁵) Может подключаться к сети 440В3~ или 500В3~.

Panther T

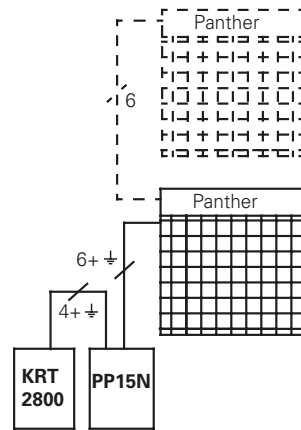
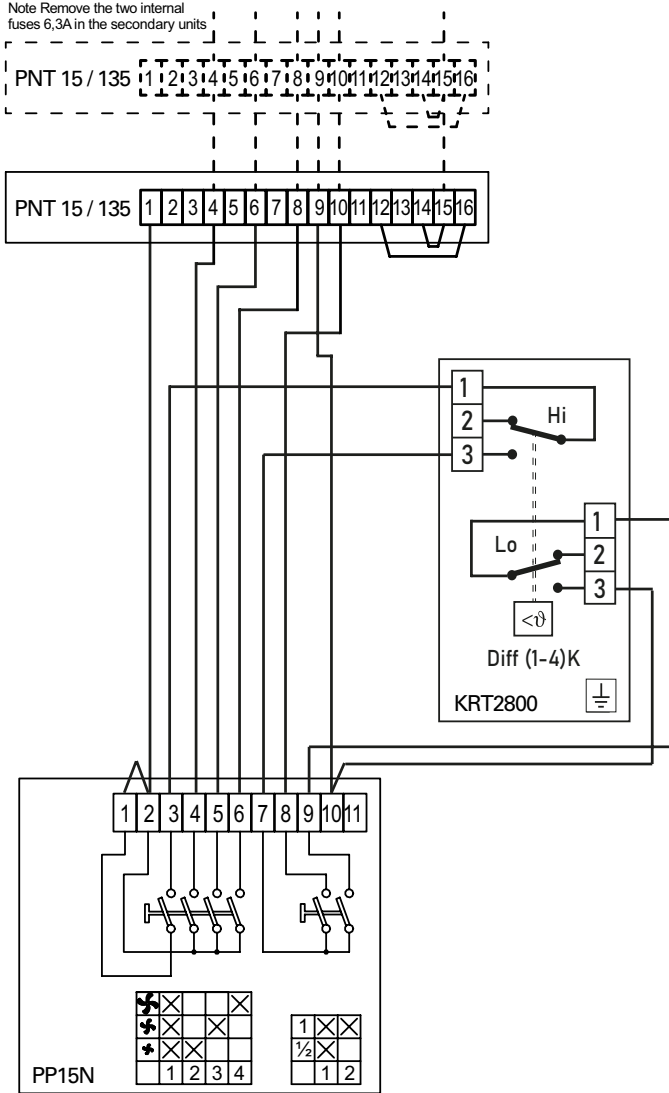
Internal wiring diagram

Panther T 13,5-15 kW



Panther T 13,5-15 kW

Note Remove the two internal fuses 6,3A in the secondary units



EN: **Note! Remove the two internal fuses 6.3A in the secondary units.**

FR: Remarque : retirez les deux fusibles internes 6,3 A des appareils secondaires.

DE: Hinweis! Entfernen Sie die beiden internen Sicherungen 6,3 A in den weiteren Geräten.

SE: OBS! Ta bort de två interna säkringarna 6,3A i de sekundära enheterna.

NO: Merk! Fjern de to interne sikringene 6,3 A i de sekundære enhetene.

DK: Bemærk! Fjern de to interne 6,3 A sikringer i de sekundære enheder.

FI: Huom! Irrota kaksi sisäistä 6,3 A varoketta seuraavista laitteista.

NL: Let op! Verwijder de twee 6,3A interne zekeringen in de secundaire units.

ES: Nota: Quite los dos fusibles internos de 6,3 A de las unidades secundarias.

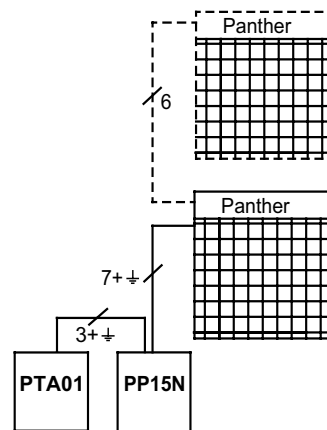
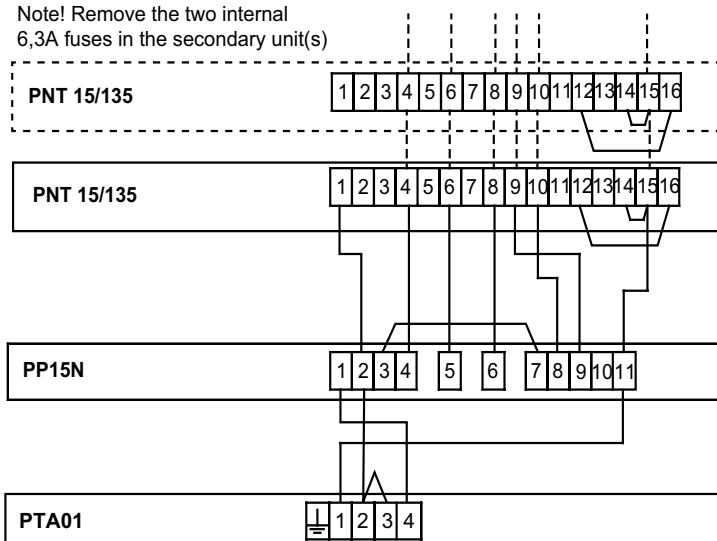
IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

PL: Uwaga! Należy usunąć dwa bezpieczniki wewnętrzne 6,3 A w dodatkowych urządzeniach.

IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

RU: Внимание! Удалите два внутренних предохранителя 6,3A в ведомых аппаратах.

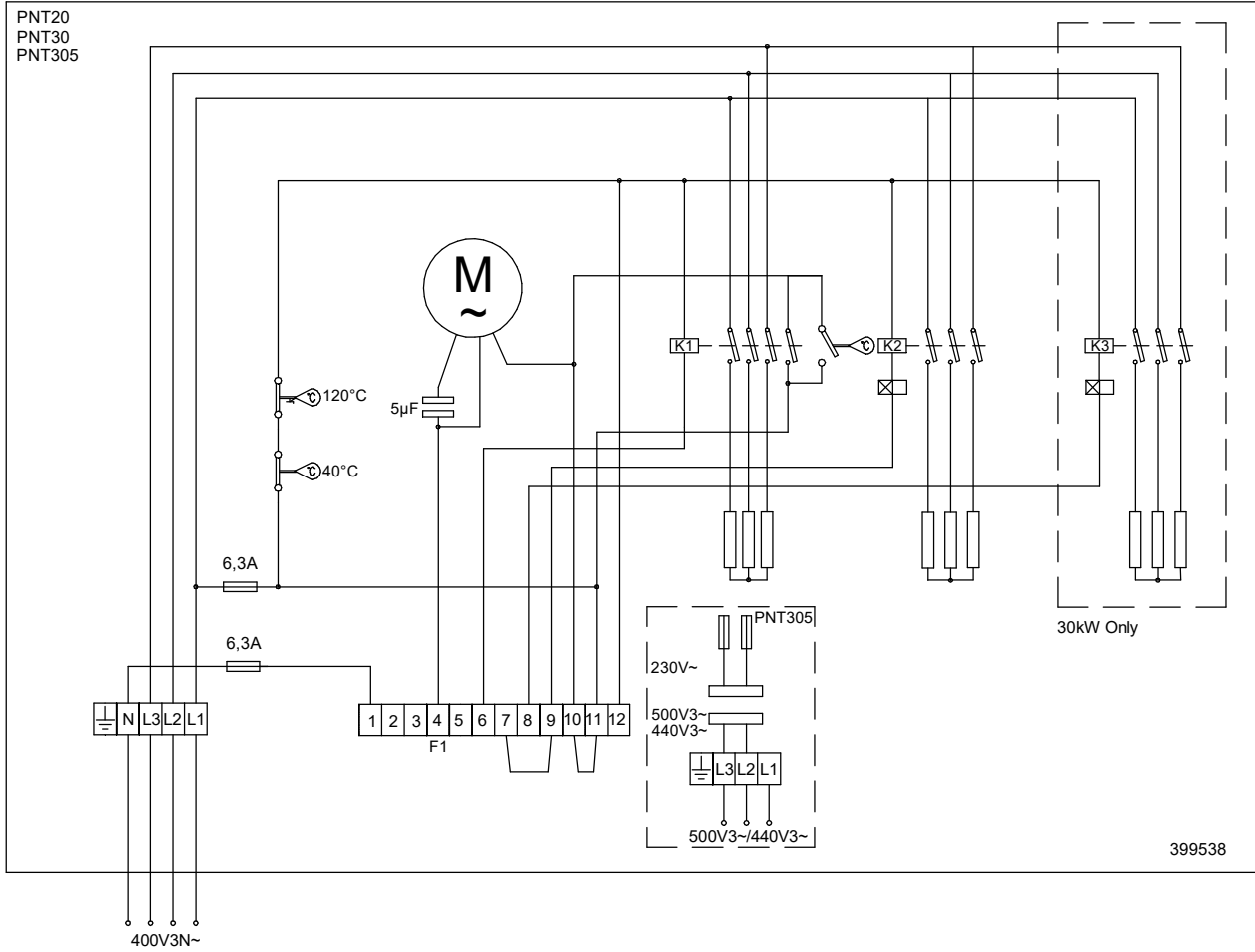
Note! Remove the two internal 6,3A fuses in the secondary unit(s)



Panther T

Internal wiring diagram

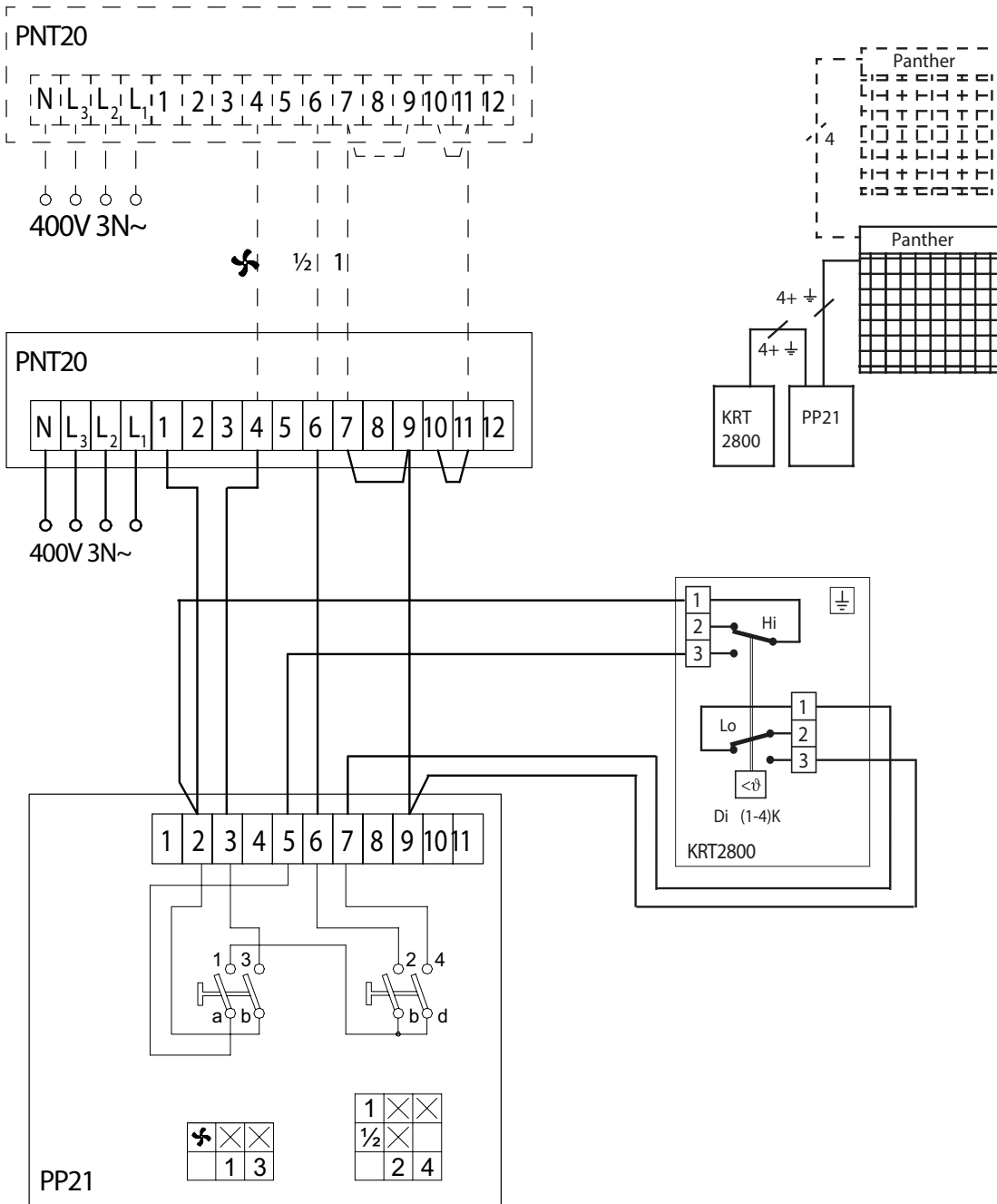
Panther T 20-30 kW



Panther T

Panther T 20 kW

Note: Remove the two internal 6,3A fuses, in the secondary units



EN: **Note! Remove the two internal fuses 6,3A in the secondary units.**

FR: Remarque : retirez les deux fusibles internes 6,3 A des appareils secondaires.

DE: Hinweis! Entfernen Sie die beiden internen Sicherungen 6,3 A in den weiteren Geräten.

SE: OBS! Ta bort de två interna säkringarna 6,3A i de sekundära enheterna.

NO: Merk! Fjern de to interne sikringene 6,3 A i de sekundære enhetene.

DK: Bemærk! Fjern de to interne 6,3 A sikringer i de sekundære enheder.

FI: Huom! Irrota kaksi sisäistä 6,3 A varoketta seuraavista laitteista.

NL: Let op! Verwijder de twee 6,3A interne zekeringen in de secundaire units.

ES: Nota: Quite los dos fusibles internos de 6,3 A de las unidades secundarias.

IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

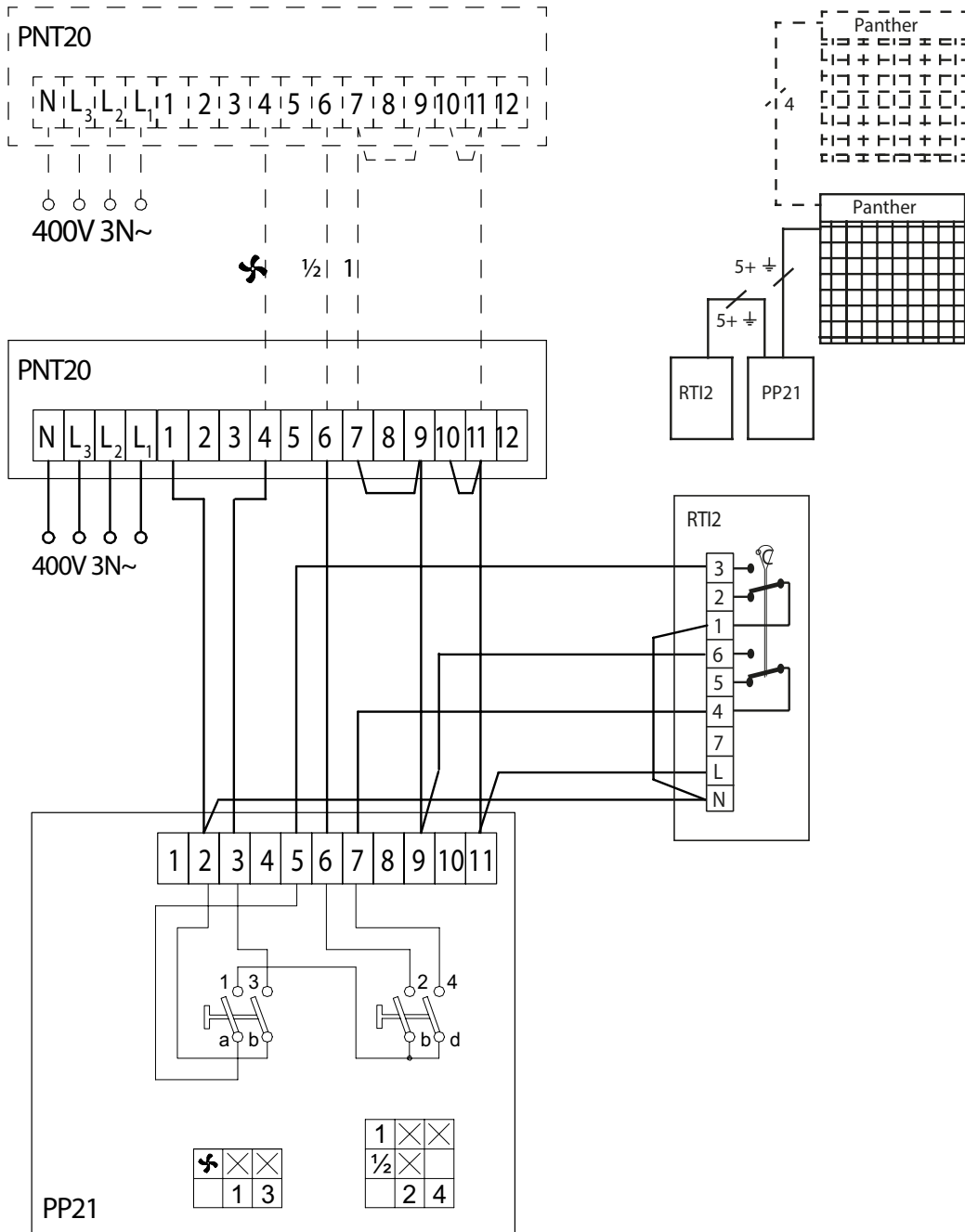
PL: Uwaga! Należy usunąć dwa bezpieczniki wewnętrzne 6,3 A w dodatkowych urządzeniach.

IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

RU: Внимание! Удалите два внутренних предохранителя 6,3A в ведомых аппаратах.

Panther T 20 kW

Note: Remove the two internal 6,3A fuses, in the secondary units



EN: **Note! Remove the two internal fuses 6.3A in the secondary units.**

FR: Remarque : retirez les deux fusibles internes 6,3 A des appareils secondaires.

DE: Hinweis! Entfernen Sie die beiden internen Sicherungen 6,3 A in den weiteren Geräten.

SE: OBS! Ta bort de två interna säkringarna 6,3A i de sekundära enheterna.

NO: Merk! Fjern de to interne sikringene 6,3 A i de sekundære enhetene.

DK: Bemærk! Fjern de to interne 6,3 A sikringer i de sekundære enheder.

FI: Huom! Irrota kaksi sisäistä 6,3 A varoketta seuraavista laitteista.

NL: Let op! Verwijder de twee 6,3A interne zekeringen in de secundaire units.

ES: Nota: Quite los dos fusibles internos de 6,3 A de las unidades secundarias.

IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

PL: Uwaga! Należy usunąć dwa bezpieczniki wewnętrzne 6,3 A w dodatkowych urządzeniach.

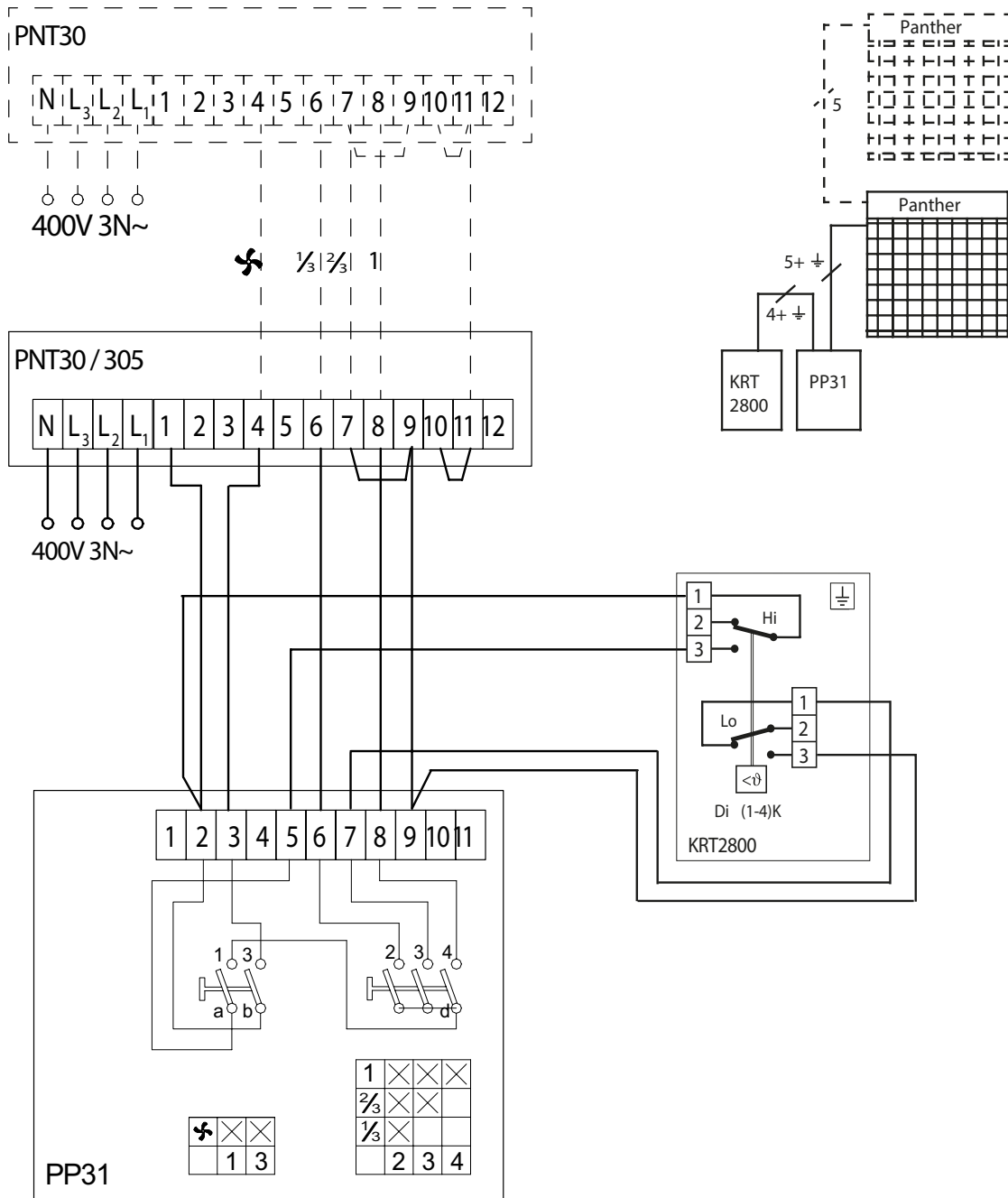
IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

RU: Внимание! Удалите два внутренних предохранителя 6,3A в ведомых аппаратах.

Panther T

Panther T 30 kW

Note: Remove the two internal 6,3A fuses, in the secondary units



EN: **Note! Remove the two internal fuses 6.3A in the secondary units.**

FR: Remarque : retirez les deux fusibles internes 6,3 A des appareils secondaires.

DE: Hinweis! Entfernen Sie die beiden internen Sicherungen 6,3 A in den weiteren Geräten.

SE: OBS! Ta bort de två interna säkringarna 6,3A i de sekundära enheterna.

NO: Merk! Fjern de to interne sikringene 6,3 A i de sekundære enhetene.

DK: Bemærk! Fjern de to interne 6,3 A sikringer i de sekundære enheder.

FI: Huom! Irrota kaksi sisäistä 6,3 A varoketta seuraavista laitteista.

NL: Let op! Verwijder de twee 6,3A interne zekeringen in de secundaire units.

ES: Nota: Quite los dos fusibles internos de 6,3 A de las unidades secundarias.

IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

PL: Uwaga! Należy usunąć dwa bezpieczniki wewnętrzne 6,3 A w dodatkowych urządzeniach.

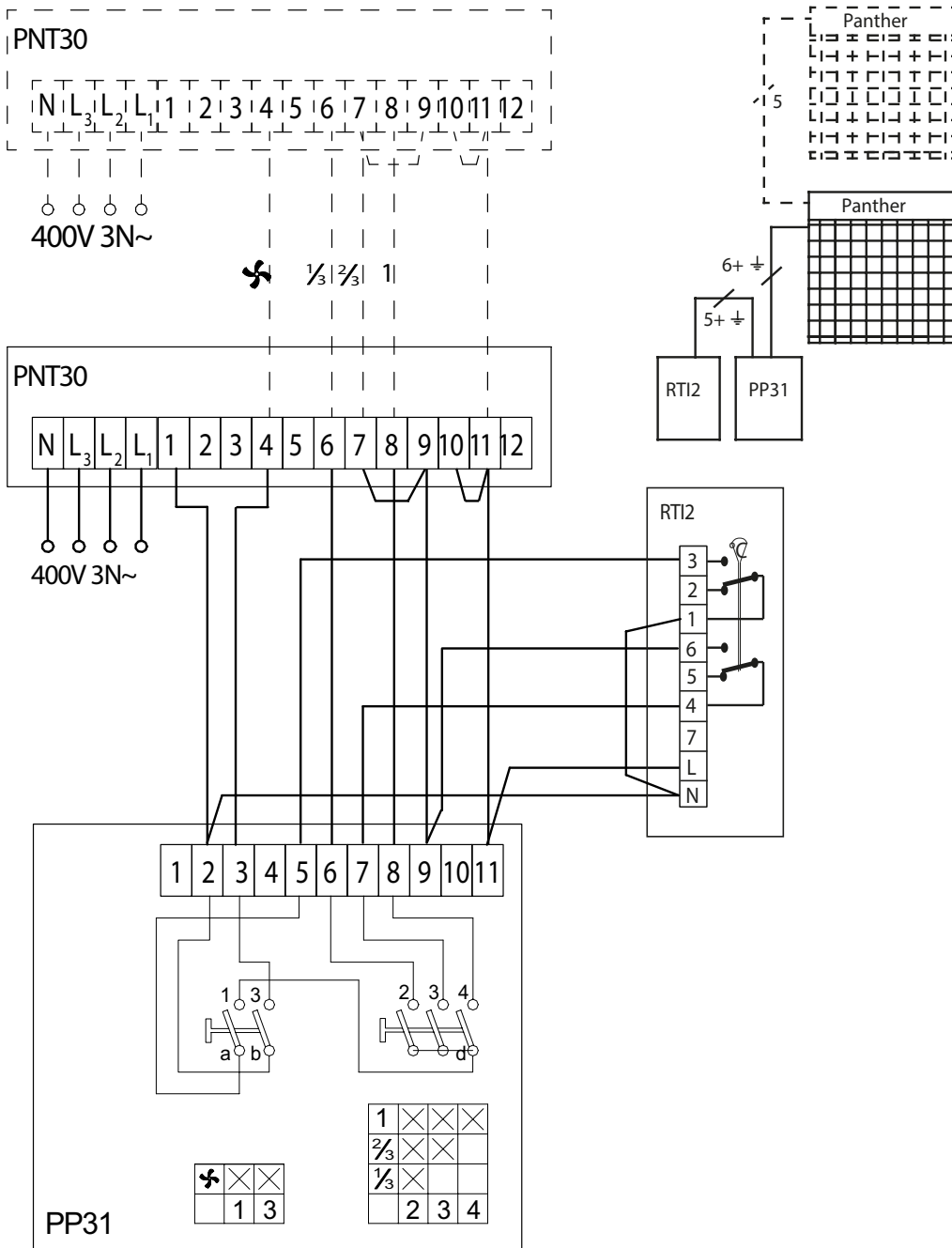
IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

RU: Внимание! Удалите два внутренних предохранителя 6,3A в ведомых аппаратах.

Panther T

Panther T 30 kW

Note: Remove the two internal 6,3A fuses, in the secondary units



EN: **Note! Remove the two internal fuses 6,3A in the secondary units.**

FR: Remarque : retirez les deux fusibles internes 6,3 A des appareils secondaires.

DE: Hinweis! Entfernen Sie die beiden internen Sicherungen 6,3 A in den weiteren Geräten.

SE: OBS! Ta bort de två interna säkringarna 6,3A i de sekundära enheterna.

NO: Merk! Fjern de to interne sikringene 6,3 A i de sekundære enhetene.

DK: Bemærk! Fjern de to interne 6,3 A sikringer i de sekundære enheder.

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IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

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IT: Nota! Rimuovere i due fusibili interni da 6,3 A nelle unità secondarie.

RU: Внимание! Удалите два внутренних предохранителя 6,3A в ведомых аппаратах.

Installation and operating instructions

General Instructions

Read these instructions carefully prior to installation and use. Keep this manual for future reference.

The product may only be used as set out in the assembly and operating instructions. The guarantee is only valid should the product be used in the manner intended and in accordance with the instructions.

Application

Panther T is a range of efficient fan heaters designed for drying and heating installations of a more technical nature. Panther T is suitable in, for example, service areas, utility rooms and drying rooms.

Protection class: IP44.

Mounting

The Panther fan heater is mounted on the wall with the supplied bracket. The bracket allows the fan heater to be angled downwards and to the side (30° left or right). The product must be mounted in such a way as to allow future service and maintenance. For minimum distance, see diagrams on the introduction pages.

The bracket is fixed to the unit during transportation to not damage the unit.

1. Detach the bracket from the unit by removing the lower screws.
2. Mark and drill the holes for the bracket's keyhole slots on the wall.
3. Mount the bracket on the wall in the desired position (straight, to the left or to the right). Use screws and plugs suitable for the wall.
4. Loosen the upper screws of the unit approximately 10 mm and hang the unit on the bracket.
5. Adjust the fan heater to the desired angle and fasten it with the lower screws on both sides of the unit.
6. Tighten all screws.

See pictures in the introduction pages.

Electrical installation

The Panther fan heater is intended for permanent installation. The installation, which should be preceded by an isolator switch with a contact separation of at least 3 mm, should



The power supply to the unit must be disconnected during all service, repair and maintenance work.

only be wired by a competent electrician and in accordance with the latest edition of IEE wiring regulations.

The electrical connection is made on the back of the unit. Pierce the grommet with a screwdriver before entering the cable. Open the lid by removing its four screws to access the connection area. The wiring diagram can be found on the inside of the lid. Power supply should be connected to the assigned terminal block. At delivery PNT15 is connected for 400V3N~, it can be connected to either 400V3N~ or 230V3~ by repositioning the Y/D (Y/Δ) connection plates. PNT135 and PNT305 can be connected to both 440V3~ and 500V3~.

When several heaters are connected to each other and controlled by a common accessory it should be indicated in the distribution board that "The fan heaters are supplied from more than one group supply". See wiring diagrams.

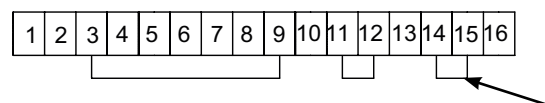
Control

Panther T must be supplemented with a control panel PP. Up to 6 units can be controlled by one control panel. PNT135 requires one PP15N per unit. The output and fan speed are set on the control panel. An external thermostat or temperature control is highly recommended to regulate the heat.

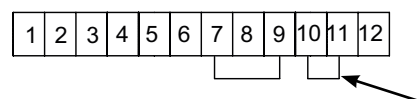
The thermostat can be set to activate both fan and heat, according to selected settings, by removing a link on the terminal block.

- PNT15/135: link between terminals 14-15
- PNT20/30/305: link between terminals 10-11

PNT15, PNT135 – Factory setting



PNT20, PNT30, PNT305 – Factory setting



A 230V~ alarm signal can be obtained when the overheat protection is triggered (or temperature limiter for PNT20/30/305).

- PNT15/135: between terminals 1 and 13
- PNT20/30/305: between terminals 1 and 12

Controls are connected via grommets on the back of the unit to assigned terminal blocks. When connecting external accessories or secondary units, the links must be adjusted according to relevant wiring diagram. See wiring diagrams.

Start-up

When the unit is used for the first time or after a long period of non-use, smoke or an odour may result from dust or dirt which has collected on the element. This is completely normal and disappears after a short time.

Overheating

The fan heater is equipped with an overheat protection. If it is deployed due to overheating, reset as follows:

1. Disconnect the power supply with the isolator switch.
2. Determine the cause of overheating and rectify the fault.
3. Reset by opening the lid and pushing the red button on top of the overheat protection until a click sound is heard. See pictures in the introduction pages.

4. Put the lid back on and reconnect the heater.
NOTE! All work inside the unit's connection area must be carried out by a qualified technician and with the power supply disconnected.

Maintenance

Since fan motors and other components are maintenance-free, no maintenance other than cleaning is necessary. The level of cleaning can vary depending on local conditions. Undertake cleaning at least twice a year. Inlet and exhaust grilles, impeller and elements can be vacuum cleaned or wiped using a damp cloth. Use a brush when vacuuming to prevent damaging sensitive parts. Avoid the use of strong alkaline or acidic cleaning agents.

Residual current circuit breaker

When the installation is protected by means of a residual current circuit breaker, which trips when the appliance is connected, this may be due to moisture in the heating element. When an appliance containing a heater element has

not been used for a long period or stored in a damp environment, moisture can enter the element.

This should not be seen as a fault, but is simply rectified by connecting the appliance to the main supply via a socket without a safety cut-out so that the moisture can be eliminated from the element. The drying time can vary from a few hours to a few days. As a preventive measure, the unit should occasionally be run for a short time when it is not being used for extended periods of time.

Packaging

Packaging materials are chosen with consideration to the environment and are therefore recyclable.

Handling of product at end of working life

This product may contain substances necessary for the functionality of the product but potentially dangerous for the environment. The product should not be disposed of mixed with general household waste but delivered to a designated collection point for environmental recycling. Please contact the local authority for further details of your nearest designated collection point.

Safety

- *For all installations of electrically heated products a residual current circuit breaker 300 mA for fire protection should be used.*
- *Keep the areas around the air intake and exhaust grilles free from possible obstructions!*
- *The unit must not be fully or partially covered as overheating can result in a fire risk!*
- *The unit must not be placed directly under fixed wall sockets!*
- *This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.*
- *Children of less than 3 years should be kept away unless continuously supervised.*
- *Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed*

in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

- *Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.*

CAUTION — Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.



Main office

Frico AB
Industrivägen 41
SE-433 61 Sävedalen
Sweden

Tel: +46 31 336 86 00
mailbox@frico.se
www.frico.net

**For latest updated information and information
about your local contact: www.frico.net**