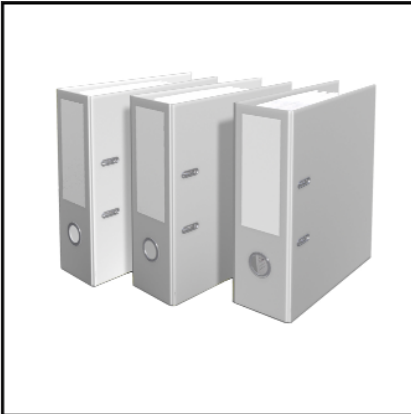
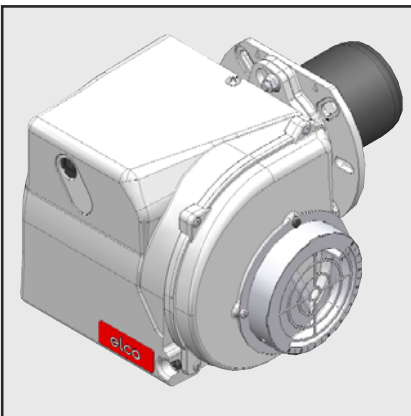


P1.40 L/TEH  
P1.60 L/TEH  
P1.105 L/TEH  
P2.130 L/TEH

# elco



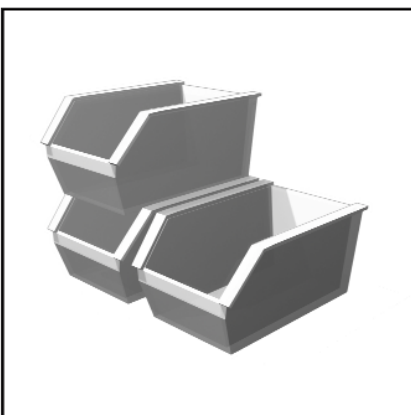
**Technische Daten**  
**Données techniques**  
**Dati tecnici**  
**Technische gegevens**  
**Technical data**



de, fr, it, nl, en .....420010577200



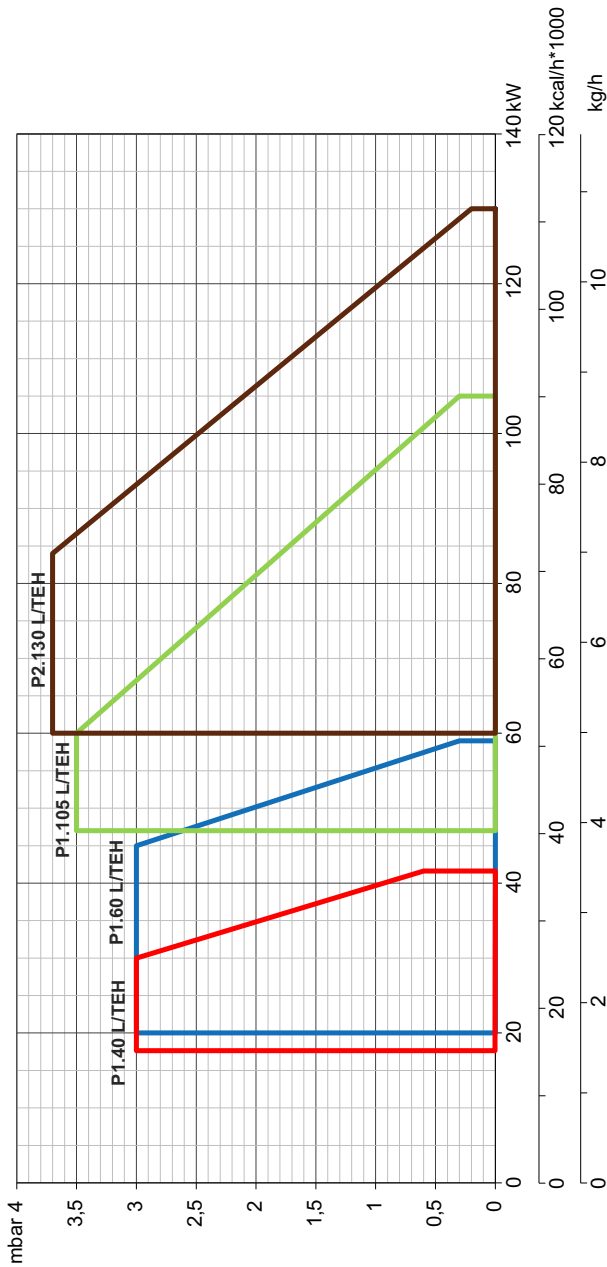
**Elektro- und Hydraulikschema**  
**Schémas électrique et hydraulique**  
**Schemi elettrico ed idraulico**  
**Elektrische en hydraulische schema**  
**Electric and hydraulic diagrams**



**Ersatzteilliste**  
**Pièces de rechange**  
**Parti ricambi**  
**Wisselstukkenlijst**  
**Spare parts list**



Technische Daten - Données techniques - Dati tecnici - Technische gegevens - Technical data												
Brennerleistung max/min kW - kcal/h	Puissance du brûleur max/min kW - kcal/h	Potenza bruciatore max/min kW - kcal/h	Branderbelasting max/min kW - kcal/h	Burner output max/min kW - kcal/h	P1.40 L/TEH		P1.60 L/TEH		P1.105 L/TEH		P2.130 L/TEH	
					41	18	59	20	105	47	130	60
Öldurchsatz max/min kg/h	Débit de fuel max/min kg/h	Portata gasolio max/min kg/h	Oliedebiet max/min kg/h	Oil throughput max/min kg/h	35604	15136	50740	17200	90300	40420	111800	51600
Betrieb 1 Bühne	Fonctionnement 1 allure	Funzionamento 1 stadio	Werking 1 fase	Operation 1 stage	3,5	1,5	5	1,7	8,9	4	11	5,1
Regelverhältnis	Rapport de régulation	Rapporto di regolazione	Regelbereik	Regulating ratio	1	1	1	1	1	1	1	1
Kraftstoff	Fuel	Combustibile	Brandstof	Fuel	Light oil (L.C.V. 10.200 kcal/kg max. visc 1,5°E at 20°C) (EL) Hu = 11,86 kWh/kg							
Emissionsklasse	Classe d'émission	Classe di emissione	Emissieklasse	Emission class	Standard Class 2 - OIL EN267 (NOx < 185 mg/kWh)							
Feuerungsautomat	Coffret de sécurité	Apparecchiatura di controllo	Branderautomaat	Control box	THERMOWATT TEH							
Luftregulierung Luftklappe	Réglage de l'air Volet d'air	Régolazione aria Serranda dell'aria	Luchtregeling Luchtkep	Air regulation Air flap	-	-	-	-	-	-	-	-
Flammenwächter	Surveillance de flamme	Rivelatore di fiamma	Vlambeveiliging	Flame monitor	photoresistor	photoresistor	photoresistor	photoresistor	photoresistor	photoresistor	photoresistor	photoresistor
Zündtransformator	Allumeur	Trasformatore d'accensione	Ontsteek trafo	Ignition transformer	2-Pole Electronic	2-Pole Electronic	2-Pole Electronic	2-Pole Electronic	2-Pole Electronic	2-Pole Electronic	2-Pole Electronic	2-Pole Electronic
Oldruckpumpe	Pompe de pulvérisation fuel	Pompa di pressione gasolio	Oliedrukpomp	Fuel-oil pump	danfoss / suntec	danfoss / suntec	danfoss / suntec	danfoss / suntec	danfoss / suntec	danfoss / suntec	danfoss / suntec	danfoss / suntec
Elektromotor rpm - watt	Moteur rpm - watt	Motore elettrico giri motore - watt	Motor rpm - watt	Electric motor rpm - watt	2800 rpm	2800 rpm	2800 rpm	2800 rpm	2800 rpm	2800 rpm	2800 rpm	2800 rpm
Spannung	Tension	Tensione	Spanning	Voltage	75 W	75 W	75 W	75 W	100 W	100 W	130 W	130 W
Elektrische Leistungsaufnahme (Betrieb)	Puissance électrique absorbée (en service)	Potenza elettrica assorbita (Esercizio)	Opgenomen elektrisch vermogen (in werking)	Power consumption (operation)	230 V / 50-60 Hz							
Gewicht	Poids	Peso	Gewicht ongeveer	Weight	300 W	300 W	300 W	300 W	350 W	350 W	400 W	400 W
Schutzart	Indice de protection	Classe di protezione	Beschermingsindex	Protection level	IP 21							
Schalldruckpegel dB(A)	Niveau pression acoustique dB(A)	Livello pressione sonora dB(A)	Geluidsrukniveau dB(A)	Sound pressure level dB(A)	60	60	65	65	65	65	65	65
Umgebungstemperatur	Température ambiante de stockage	Temperatura ambiente di stoccaggio	Omgevingstemperatuur opslag	Ambient temp. for storage	-20° ...+70° C							
Betriebstemperatur	Température d'utilisation	Temperatura d'utilizzazione	Omgevingstemperatuur werking: min./max	Temperature for use	-10° ...+60° C							



### Arbeitsfeld

Das Arbeitsfeld zeigt die Brennerleistung in Abhängigkeit vom Feuerraumdruck. Es entspricht den Maximalwerten nach EN 676 gemessen am Prüfflammrohr.

**Bei der Brennerauswahl ist der Kesselwirkungsgrad zu berücksichtigen.**

Berechnung der Brennerleistung:

$$QF = \frac{Q_N}{\eta_K}$$

QF = Brennerleistung (kW)

Q<sub>N</sub> = Kesselinnleistung (kW)

$\eta_K$  = Kesselwirkungsgrad (%)

### Domaine de fonctionnement

Le domaine de fonctionnement correspond aux valeurs mesurées lors de l'homologation.

Elle correspond aux valeurs max mesurées sur tunnel d'essai d'après l'EN 676.

**Pour le choix du brûleur, tenir compte du rendement de la chaudière.**

Calcul de la puissance calorifique:

$$QF = \frac{Q_N}{\eta_K}$$

QF= Puissance calorifique (kW)

Q<sub>N</sub>= Puissance nominale chaudière (kW)

$\eta_K$  = Rendement chaudière (%)

### Curva

Il campo di attività indica la potenza del bruciatore in funzione della pressione della camera di combustione.

Corrisponde ai valori massimi previsti dalla norma EN 676 misurati sul tubo della fiamma di controllo.

**In occasione della scelta del bruciatore si deve tenere conto del rendimento energetico della caldaia.**

Calcolo della potenza della caldaia:

$$QF = \frac{Q_N}{\eta_K}$$

QF= potenza della caldaia (kW)

Q<sub>N</sub>= potenza nominale della caldaia (kW)

$\eta_K$  = rendimento energetico della caldaia (%)

### Werkingsgebied

Het werkveld toont het brandervermogen afhankelijk van de druk in de verbrandingskamer. Het stemt overeen met de maximale waarden conform EN 676 gemeten op de testvlambuis.

**Bij de keuze van de brander dient rekening te worden gehouden met het ketelrendement.**

Berekening van het brandervermogen:

$$QF = \frac{Q_N}{\eta_K}$$

QF = Brandervermogen (kW)

Q<sub>N</sub> = Nominaal ketelvermogen (kW)

$\eta_K$  = Ketelrendement (%)

### Working field

The working field shows burner output as a function of combustion chamber pressure.

It corresponds to the maximum values specified by EN 676 measured at the test fire tube. **The efficiency rating of the boiler should be taken into account when selecting a burner.**

Calculation of burner output:

$$QF = \frac{Q_N}{\eta_K}$$

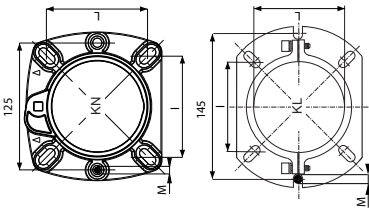
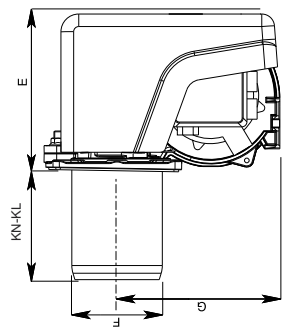
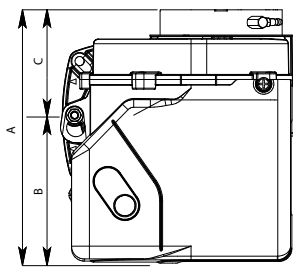
QF = Burner output (kW)

Q<sub>N</sub>= Rated boiler output (kW)

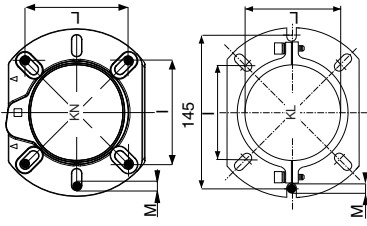
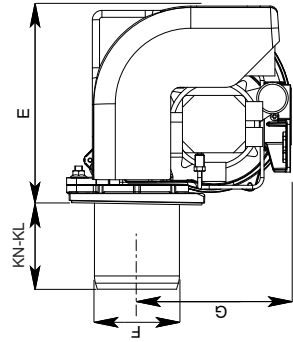
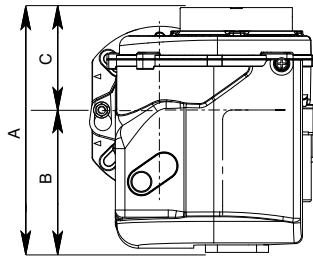
$\eta_K$  = Boiler efficiency rating %



P1.40 L/TEH



P1.60-105-130 L/TEH

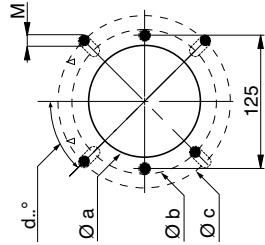


Model	A	B	C	KN	KL	E	F	G	I	L	M
P1.40 L/TEH KN	245	143	102	80	-	153	89	160	92/107	92/107	M8
P1.40 L/TEH KL	245	143	102	-	98	153	89	160	96/116	96/116	M8
P1.60 L/TEH KN	255	149	106	90	-	204	89	160	100/120	100/120	M8
P1.60 L/TEH KL	255	149	106	-	103	204	89	160	96/116	96/116	M8
P1.105 L/TEH KN	261	155	106	90	-	204	89	160	100/120	100/120	M8
P1.105 L/TEH KL	261	155	106	-	103	204	89	160	96/116	96/116	M8
P2.130 L/TEH	275	169	106	115	128	204	98	160	100/120	100/120	M8

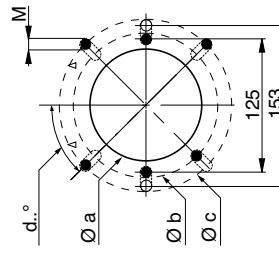
**Boiler plate drilling**

Model	Ø a	Ø b	Ø c	d°
P1.40 L/TEH KN	100	130	150	45°
P1.40 L/TEH KL	100	136	145	45°
P1.60 L/TEH KN	110	140	170	45°
P1.60 L/TEH KL	100	136	145	45°
P1.105 L/TEH KN	110	140	170	45°
P1.105 L/TEH KL	100	136	145	45°
P2.130 L/TEH	110	140	170	45°

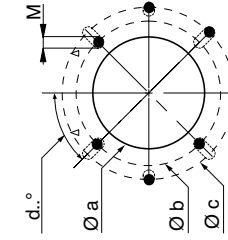
P 40 KN



P 60 KN - P 105 KN - P 130



P 40 KL - P 105 KL



KN = Short head KL = Long head

**Packaging**

Model	X	Y	Z	Kg
P1.40 L/TEH KN	330	385	290	9,5
P1.40 L/TEH KL	380	400	290	9,5
P1.60 L/TEH	385	415	275	10,6
P1.105 L/TEH	385	415	275	10,9
P2.130 L/TEH	385	415	275	11,2

