

# 1. Product specification

## Technical data

<b>Article number</b>	179572
<b>Type</b>	ZC091-SDQ.7Q.V5
<b>Designation</b>	ZAplus axial fan with diecast blades
<b>Rated values</b>	3~400V±10% D/Y 50Hz P <sub>1</sub> 2,80/1,70kW 5,40/ 2,90A 840/ 650/min COSY 0,73 70°C 3~400V±10% D/Y 60Hz P <sub>1</sub> 3,80/1,95kW 890/ 620/min COSY 0,83 60°C 3~460V±10% D/Y 60Hz P <sub>1</sub> 4,30/2,40kW 6,60/ 3,60A950/ 690/min COSY 0,80 60°C
<b>Electrical connection</b>	Terminal box K07
<b>Min. operating temperature °C</b>	-40
<b>Mounting type terminal box</b>	Mounted on Stator
<b>Type of protection</b>	IP54
<b>Thermal class</b>	THCL155
<b>Connection diagram</b>	1360-108XA
<b>Rating plate</b>	1x fixed
<b>Fitting position</b>	H/Vu/Vo
<b>Motor protection</b>	thermal contact
<b>Impregnation</b>	Moisture and hot climate protection
<b>Quality of bearings</b>	ball bearing with long-time lubrication
<b>Material Rotor</b>	Aluminium
<b>Painting rotor</b>	unpainted
<b>Material blades</b>	Aluminium
<b>Painting impeller</b>	unpainted
<b>Guard grille type</b>	ring grill
<b>Control</b>	--
<b>Painting housing</b>	Bell mouth unpainted
<b>Colour housing</b>	black
<b>Weight kg</b>	60,00
<b>ErP Data</b>	Efficiency $\eta_{statA}$ : 45,6 % Efficiency grade: $N_{actual} = 49,2 / N_{target} = 40^*$ *ErP 2015

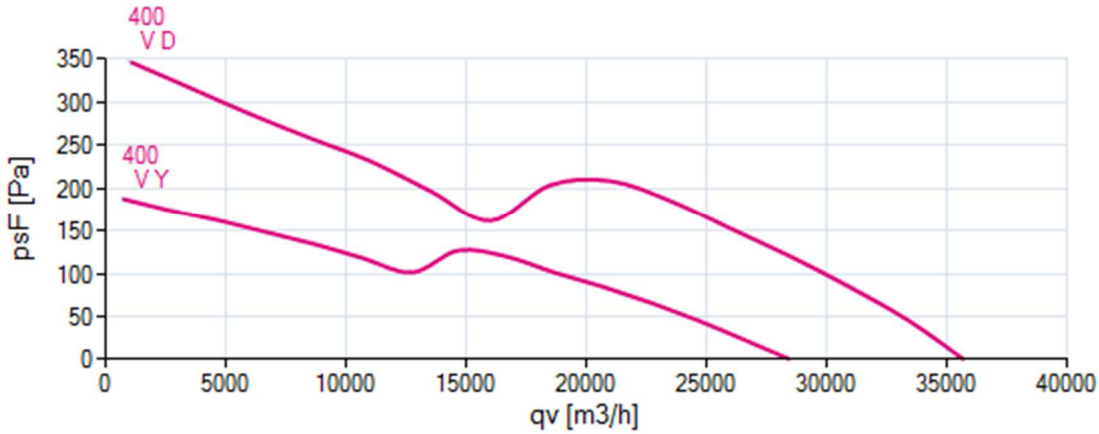
### 2. Characteristic curve

ZC091-SDQ.7Q.V5

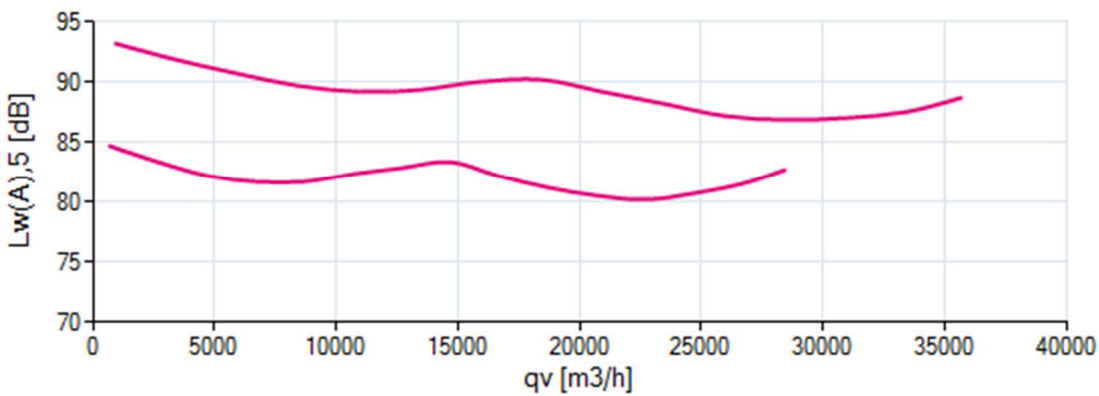
3~ 400V 50Hz D

Messdichte 1,16

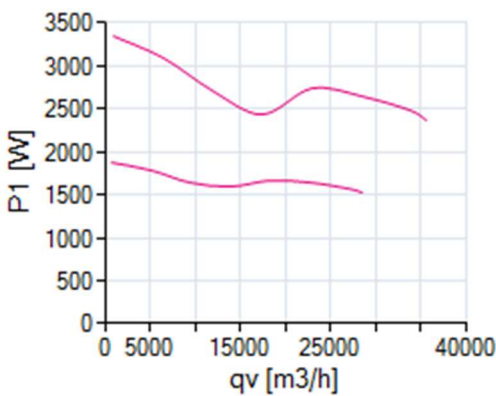
#### Air performance



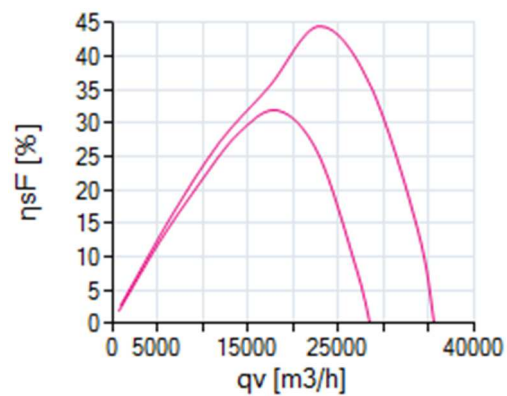
#### Acoustics



#### Power input



#### Efficiency



Please note: It's not allowed to use this fan in the stall area!\*

\*In doubt please ask your responsible ZIEHL-ABEGG sales contact.

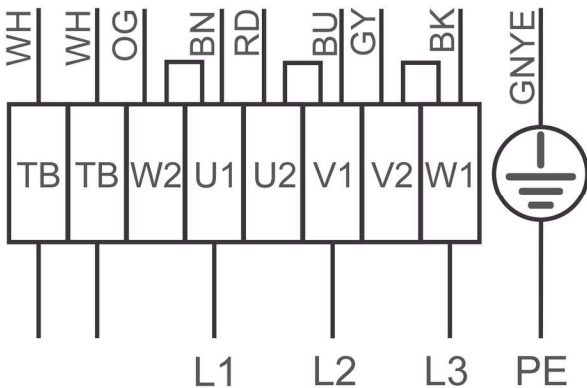
### 3. Connection diagram

#### 1360-108XA

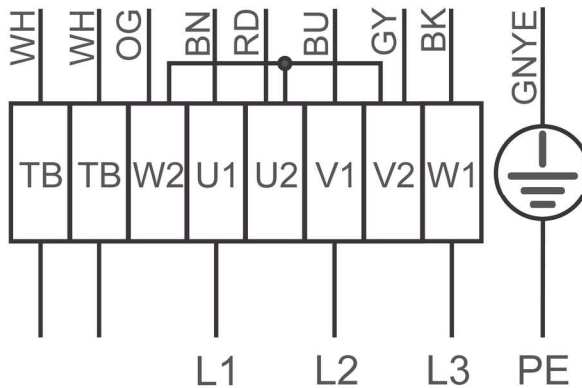
3~ motor, 2 speeds ( $\Delta$ /Y switch over) with thermostatic switch (if built in). Without bridge when using speed change-over switch.

- BN brown
- BU blue
- BK black
- RD red
- GY grey
- OG orange
- WH white
- GNYE green-yellow

High speed/D-connection



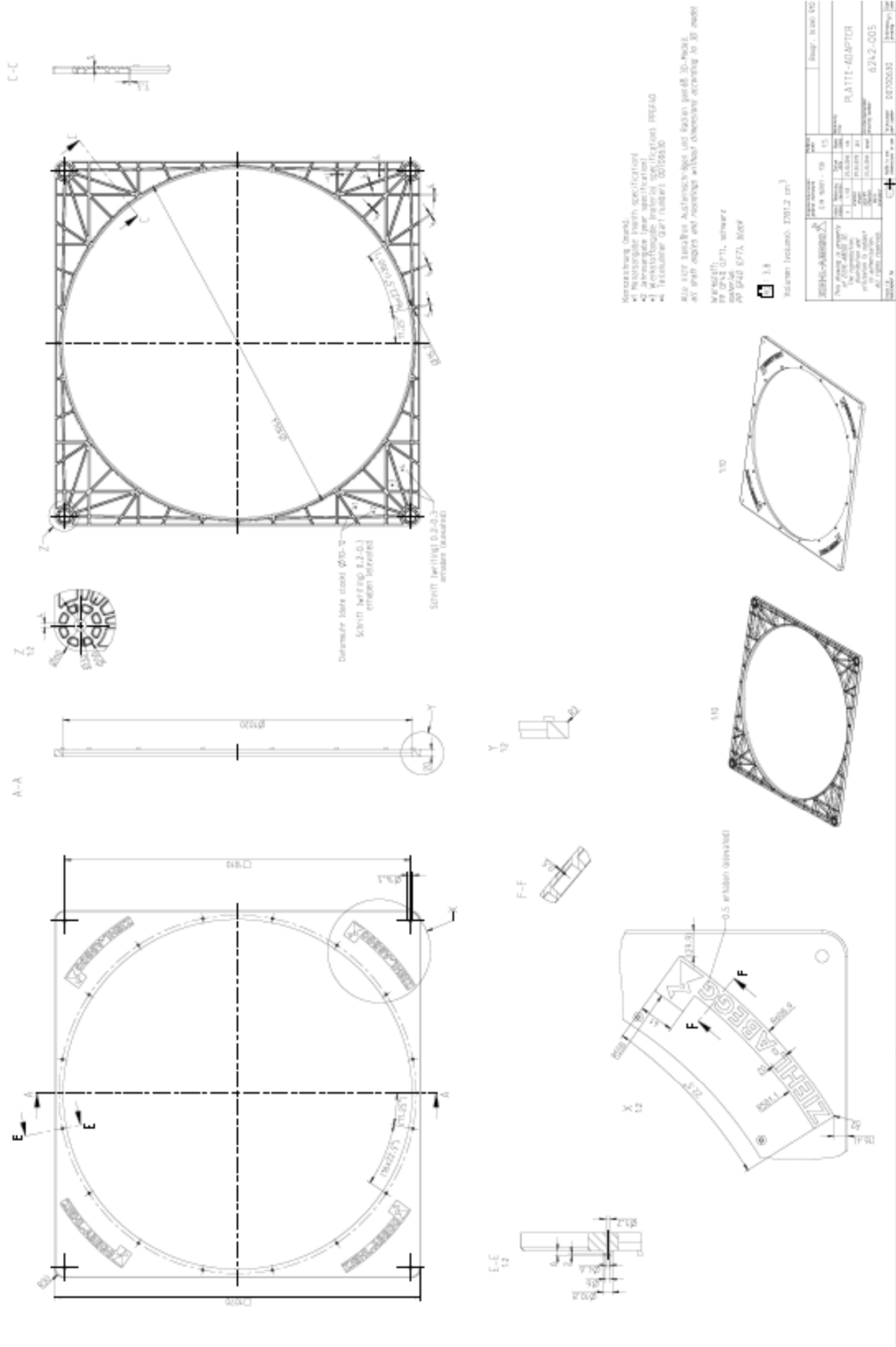
Low speed/Y-connection





# The Royal League

## Die Königsklasse







Messergebnisse / Measurement results

Ventilatormessung / fan measurement

ZIEHL-ABEGG SE  
Heinz-Ziehl-Straße  
74653 Künzelsau  
Tel.: +49 (7940) 16 - 0  
http://www.ziehl-abegg.de

### ZC091-SDQ.7Q.V5

#### Beschreibung / Description

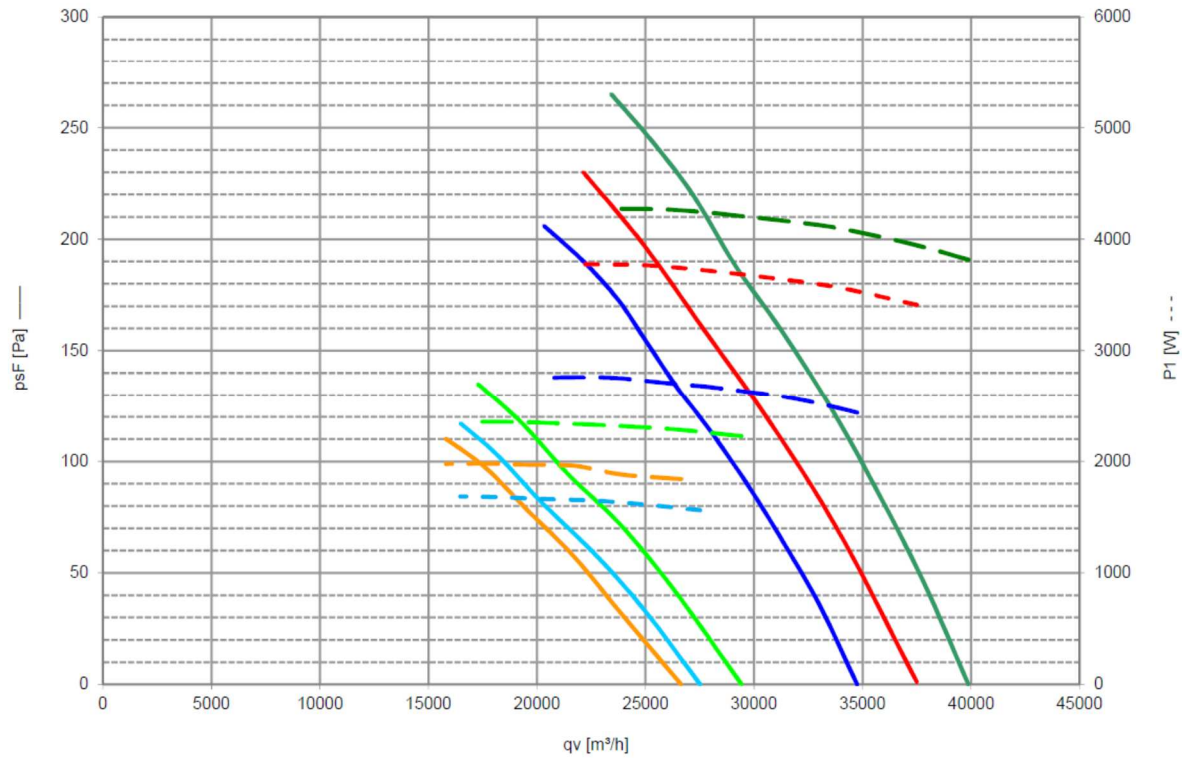
Typ: ZC091-SDQ.7Q.V5  
3~ 400V ±10% D/Y 50Hz P1 2,80/1,70kW (2,0/0,94kW 2HP)  
5,4/2,9A 840/650/MIN COSY 0,73 70°C  
3~ 400V ±10% D/Y 60Hz P1 3,80/1,95kW (2,3/0,81kW 3HP)  
6,6/3,4A 890/620/MIN COSY 0,83 60°C  
3~ 460V ±10% D/Y 60Hz P1 4,30/2,40kW (2,8/1,1kW 4HP)  
6,6/3,6A 950/690/MIN COSY 0,80 60°C  
IP54 THCL 155

Messaufbau / Assembling:  
Ventilator montiert in ZAplus-Einheit mit druckseitigem Berührungsgitter.  
Fan measured in ZAplus-unit with guard grille on pressure side.

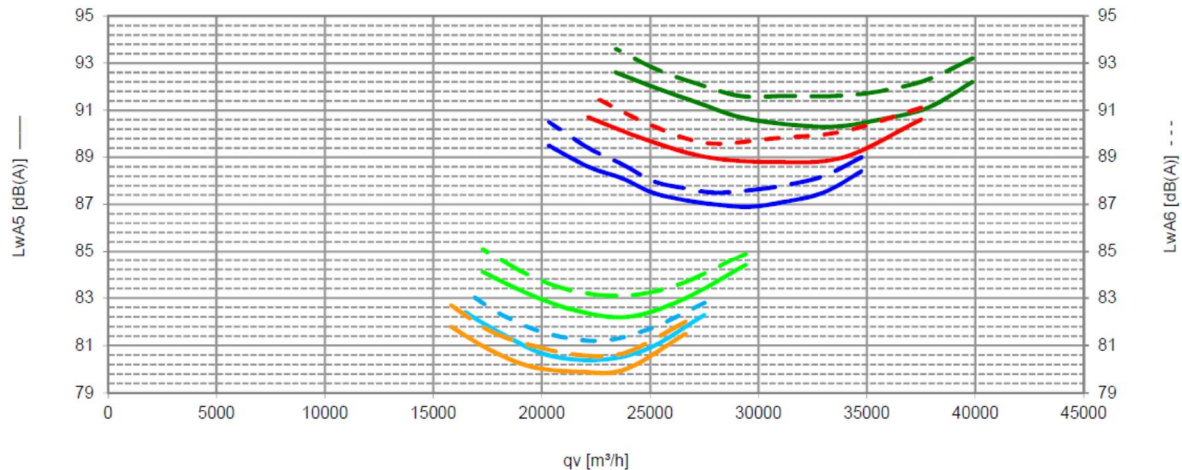
#### Legende / Legend

- A) 3~ 400V 50Hz D [ID 120834]
  - B) 3~ 400V 50Hz Y [ID 120834]
  - C) 3~ 400V 60Hz D [ID 120835]
  - D) 3~ 400V 60Hz Y [ID 120835]
  - E) 3~ 460V 60Hz D [ID 120835]
  - F) 3~ 460V 60Hz Y [ID 120835]
- Gemessen mit üblichen Toleranzen / Measured with normal tolerances

#### 1. Diagramm / Chart : Volumenstrom - Druckerhöhung - elektr. Leistungsaufnahme / Airflow - Pressure - Electr. Power Input



#### 2. Diagramm / Chart : Volumenstrom - Akustik / Airflow - Acoustics



171689



### Messergebnisse / Measurement results

### Ventilormessung / fan measurement

ZIEHL-ABEGG SE  
Heinz-Ziehl-Straße  
74653 Künzelsau  
Tel.: +49 (7940) 16 - 0  
<http://www.ziehl-abegg.de>

### ZC091-SDQ.7Q.V5

#### Beschreibung / Description

Typ: ZC091-SDQ.7Q.V5  
3~ 400V ±10% D/Y 50Hz P1 2,80/1,70kW (2,0/0,94kW 2HP)  
5,4/2,9A 840/650/MIN COSY 0,73 70°C  
3~ 400V ±10% D/Y 60Hz P1 3,80/1,95kW (2,3/0,81kW 3HP)  
6,6/3,4A 890/620/MIN COSY 0,83 60°C  
3~ 460V ±10% D/Y 60Hz P1 4,30/2,40kW (2,8/1,1kW 4HP)  
6,6/3,6A 950/690/MIN COSY 0,80 60°C  
IP54 THCL 155

#### Legende / Legend

A) 3~ 400V 50Hz D [ID 120834]  
B) 3~ 400V 50Hz Y [ID 120834]  
C) 3~ 400V 60Hz D [ID 120835]  
D) 3~ 400V 60Hz Y [ID 120835]  
E) 3~ 460V 60Hz D [ID 120835]  
F) 3~ 460V 60Hz Y [ID 120835]  
Gemessen mit üblichen Toleranzen / Measured with normal tolerances

#### Messaufbau / Assembling:

Ventilator montiert in ZPlus-Einheit mit druckseitigem Berührschutzgitter.  
Fan measured in ZPlus-unit with guard grille on pressure side.

### 3. Datentabelle / Data table

Pos.	qv [m³/h]	psF [Pa]	P1 [W]	I <sub>m</sub> [A]	LwA5 [dB(A)]	LwA6 [dB(A)]
A) »»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»
1	34745	0	2438	4,99	88	89
2	32994	36	2520	5,09	88	88
3	31143	67	2590	5,18	87	88
4	29598	91	2630	5,24	87	88
5	27961	114	2673	5,29	87	88
6	26479	133	2699	5,33	87	88
7	25105	153	2725	5,36	88	88
8	23721	173	2753	5,40	88	89
9	22140	190	2761	5,41	89	89
10	20321	206	2755	5,40	90	91
B) »»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»
1	27511	0	1561	4,70	82	83
2	24973	33	1611	4,83	81	82
3	22707	58	1647	4,93	80	81
4	20269	81	1662	4,99	81	82
5	18149	103	1679	5,03	82	82
6	16473	117	1684	5,04	82	83
C) »»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»
1	37501	1	3411	6,03	91	91
2	33929	68	3565	6,26	89	90
3	30705	118	3654	6,40	89	90
4	27648	160	3722	6,51	89	90
5	24949	197	3766	6,58	90	90
6	22136	230	3775	6,59	91	92
D) »»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»
1	26637	0	1840	5,52	82	82
2	23859	32	1882	5,66	80	81
3	21728	57	1960	5,93	80	81
4	19565	78	1969	5,97	80	81
5	17639	97	1979	6,00	81	82
6	15809	110	1976	5,99	82	83
E) »»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»
1	39876	0	3816	6,14	92	93
2	37804	46	3930	6,29	91	92
3	35603	88	4030	6,41	91	92
4	33491	125	4112	6,52	90	92
5	31266	159	4167	6,59	90	92
6	29148	188	4212	6,65	91	92
7	27240	219	4250	6,70	91	92
8	25379	243	4270	6,72	92	93
9	23420	265	4271	6,72	93	94
F) »»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»	»»»»»»»»
1	29421	0	2226	5,78	84	85
2	26417	41	2286	5,95	83	84
3	23897	71	2316	6,03	82	83
4	21454	94	2337	6,08	83	83
5	19320	117	2352	6,13	83	84
6	17275	135	2356	6,14	84	85