

Таблица 1

Базовые расчетные соотношения для одной фазы групповых структур с трехфазными i -ми ТРПН

Способ рег. Параметр	Рисунок 1, a	Рисунок 1, b	Рисунок 1, $в$	Рисунок 1, $г$
$\bar{U}_{npi}$	$\sqrt{\frac{1}{\pi} \left(\pi - \alpha_i + \frac{1}{2} \sin 2\alpha_i \right)}$		$\frac{1}{\sqrt{\pi}} \sqrt{\lambda_i + \sin \lambda_i}$	$\frac{1}{\sqrt{\pi}} \sqrt{\pi - \alpha_i - \sin \alpha_i}$
$\bar{P}_{a\Sigma}$	$\sum_{i=1}^n \frac{\kappa_i}{\pi} \left(\pi - \alpha_i + \frac{1}{2} \sin 2\alpha_i \right)$		$\sum_{i=1}^n \frac{\kappa_i}{\pi} (\lambda_i + \sin \lambda_i)$	$\sum_{i=1}^n \frac{\kappa_i}{\pi} (\pi - \alpha_i - \sin \alpha_i)$
$\bar{Q}_{\Sigma}$	$\sum_{i=1}^n \frac{\sin^2 \alpha_i \kappa_i}{\pi}$	$-\sum_{i=1}^n \frac{\sin^2 \alpha_i \kappa_i}{\pi}$	0	0
$\bar{I}_{1(1)i}$	$\kappa_i \sqrt{\frac{\sin^4 \alpha_i}{\pi^2} + \bar{U}_{npi}^4}$	$\kappa_i \sqrt{\frac{\sin^4 \alpha_i}{\pi^2} + \bar{U}_{npi}^4}$	$\sum_{i=1}^n \frac{\kappa_i}{\pi} (\lambda_i + \sin \lambda_i)$	$\sum_{i=1}^n \frac{\kappa_i}{\pi} (\pi - \alpha_i - \sin \alpha_i)$
$\sum_{i=1}^n \bar{A}_{(k)i}$	$\frac{1}{\sqrt{2\pi}} \sum_{i=1}^n \kappa_i \left[\frac{1 - \cos(\kappa + 1)(\pi - \alpha_i)}{\kappa + 1} - \frac{1 - \cos(\kappa - 1)(\pi - \alpha_i)}{\kappa - 1} \right]$	$\frac{1}{\sqrt{2\pi}} \sum_{i=1}^n \kappa_i \left[\frac{1 - \cos(\kappa - 1)(\pi - \alpha_i)}{\kappa - 1} - \frac{1 - \cos(\kappa + 1)(\pi - \alpha_i)}{\kappa + 1} \right]$	0	0
$\sum_{i=1}^n \bar{B}_{(k)i}$	$\frac{1}{\sqrt{2\pi}} \sum_{i=1}^n \kappa_i \left[\frac{\sin(\kappa + 1)(\pi - \alpha_i)}{\kappa + 1} - \frac{\sin(\kappa - 1)(\pi - \alpha_i)}{\kappa - 1} \right]$		$\frac{1}{\sqrt{2\pi}} \sum_{i=1}^n \kappa_i \left[\frac{\sin(\kappa - 1) \cdot \lambda_i / 2}{\kappa - 1} - \frac{\sin(\kappa + 1) \cdot \lambda_i / 2}{\kappa + 1} \right]$	$\frac{1}{\sqrt{2\pi}} \sum_{i=1}^n \kappa_i \left[\frac{\sin(\kappa + 1) \cdot \lambda_i}{\kappa - 1} - \frac{\sin(\kappa - 1) \cdot \lambda_i}{\kappa - 1} \right]$
$\sum_{i=1}^n \bar{A}_{(1)i}$	$\sum_{i=1}^n \kappa_i \frac{\cos 2\alpha_i - 1}{2\sqrt{2\pi}}$	$\sum_{i=1}^n \kappa_i \frac{1 - \cos 2\alpha_i}{2\sqrt{2\pi}}$	0	0
$\sum_{i=1}^n \bar{B}_{(1)i}$	$\sum_{i=1}^n \kappa_i \frac{2(\pi - \alpha_i) + \sin 2\alpha_i}{2\sqrt{2\pi}}$		$\sum_{i=1}^n \kappa_i \frac{\lambda_i + \sin \lambda_i}{\sqrt{2\pi}}$	$\sum_{i=1}^n \kappa_i \frac{\pi - \alpha_i - \sin \alpha_i}{\sqrt{2\pi}}$
$\bar{I}_{1\Sigma}$	$\left\{ \sum_{k=1}^P \left[\left(\sum_{i=1}^n \bar{A}_{(k)i} \right)^2 + \left(\sum_{i=1}^n \bar{B}_{(k)i} \right)^2 \right] \right\}^{1/2}$		$\left[\left(\sum_{i=1}^n \bar{B}_{(k)i} \right)^2 \right]^{1/2}$	
$\bar{S}_{n\Sigma}$	$\bar{I}_{1\Sigma}$			
$\bar{P}_{u\Sigma}$	$\left\{ \bar{I}_{1\Sigma}^2 - \left[\sum_{i=1}^n \frac{\kappa_i}{\pi} \left(\pi - \alpha_i + \frac{1}{2} \sin 2\alpha_i \right) \right]^2 - \left[\sum_{i=1}^n \frac{\kappa_i}{\pi} \sin^2 \alpha_i \right]^2 \right\}^{1/2}$		$\left\{ \bar{I}_{1\Sigma}^2 - \left[\sum_{i=1}^n \frac{\kappa_i}{\pi} (\lambda_i + \sin \lambda_i) \right]^2 \right\}^{1/2}$	$\left\{ \bar{I}_{1\Sigma}^2 - \left[\sum_{i=1}^n \frac{\kappa_i}{\pi} (\pi - \alpha_i - \sin \alpha_i) \right]^2 \right\}^{1/2}$